

AUTHOR King, Alan J. C.; And Others
 TITLE Canada Youth & AIDS Study.
 INSTITUTION Queen's Univ., Kingston (Ontario). Social Program
 Evaluation Group.
 SPONS AGENCY Department of National Health and Welfare, Ottawa
 (Ontario). Federal Centre for AIDS.
 REPORT NO ISBN-0-88911-520-6
 PUB DATE Nov 88
 NOTE 162p.; Graphs using color contrast may not reproduce
 well. For a related study, see CG 022 755.
 AVAILABLE FROM Federal Centre for AIDS, Health Protection Branch,
 Health and Welfare Canada, 301 Elgin St., Ottawa,
 Ontario K1A 0L2.
 PUB TYPE Reports - Research/Technical (143)

 EDRS PRICE MF01/PC07 Plus Postage.
 DESCRIPTORS *Acquired Immune Deficiency Syndrome; *Adolescents;
 College Freshmen; Foreign Countries; Grade 7; Grade
 9; Grade 11; Higher Education; Knowledge Level;
 Secondary Education; *Secondary School Students;
 *Student Attitudes; *Student Behavior; *Young
 Adults
 IDENTIFIERS *Canada

ABSTRACT

This report contains the findings from a survey of over 38,000 youth in grades 7, 9, 11, and the first year of college or university, designed to obtain a cross-sectional perspective of the development of knowledge, attitudes, and behaviors related to Acquired Immune Deficiency Syndrome and other sexually transmitted diseases (STDs). Also included in the sample were youth who had recently dropped out of full-time attendance at school and those who spent most of their time on the streets of large cities. The first of this report's eight chapters provides an introduction to the study. Chapter II describes the young people's characteristics. Chapter III focuses on what respondents know about AIDS and other STDs and the accuracy of their knowledge. Chapter IV reviews from whom and where young people have learned about sex, birth control, STDs, and AIDS. Chapter V examines young people's attitudes toward people with AIDS or human immunodeficiency virus (HIV) infection and homosexuals and homosexuality, and the influence of self-esteem, mental health, and relationships with friends and parents on their attitudes. Chapter VI documents the sexual behaviors of young people and considers factors that influence these behaviors. A description of what was learned through face-to-face interviews with street youth across Canada is included in chapter VII. The final chapter identifies the young people at greatest risk and explores the implications of the main findings. Educational initiatives and social interventions are suggested. Numerous statistical figures supplement the text. (NB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

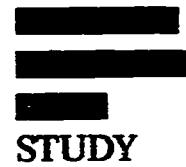
STUDY

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Lerfeld

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

Queen's University at Kingston



A Project funded by the National Endowment for the Humanities
in cooperation with the National Endowment for the Arts
Humanities and Democracy in Canada

STUDY

**Alan J.C. King
Richard P. Beazley
Wendy K. Warren
Catherine A. Hankins
Alan S. Robertson
Joyce L. Radford**



**Social Program Evaluation Group
Queen's University at Kingston**

For further information about this study, contact:

Dr. Alan J.C. King, Director
Social Program Evaluation Group
Duncan McArthur Hall
Queen's University
Kingston, Ontario
K7L 3N6
(613) 545-6255

Copies of this report are available from:

Federal Centre for AIDS
Health Protection Branch
Health and Welfare Canada
301 Elgin Street
Ottawa, Ontario
K1A 0L2
(613) 957-1772

ISBN 0-88911-515-X

Contents

I	Introduction	
A .	Background	1
B .	Historical perspective	2
C .	Rationale for the study	5
D .	Research design	7
1.	Sample	7
2.	Instruments	8
E .	Interpreting the findings	9
F .	Organization of the report	10
II	Characteristics of adolescents surveyed	
A .	Introduction	11
B .	The home	13
1.	Living arrangements	13
2.	Parents' occupation and education	14
3.	Relationship with parents	16
C .	Church attendance	18
D .	Personal characteristics	19
1.	Aspirations	19
2.	Self-esteem	19
3.	Mental health	22
4.	Relationship with peers	23
E .	Substance use	27
1.	Alcohol	27
2.	Use of other substances	28
F .	Interrelationships	32
G .	Summary	34
III	Knowledge of AIDS and other STDs	
A .	Introduction	35
B .	Specific knowledge of AIDS and other STDs	37
1.	AIDS	37
a.	Definition	37
b.	Transmission and protection	38
c.	Myths	39
2.	Other STDs	40
C .	Factors influencing knowledge of AIDS and other STDs	41
D .	Overview of knowledge of AIDS	42
E .	Provincial/territorial differences	43
F .	Summary	44
IV	Sources of information	
A .	Introduction	45
1.	Media	45
2.	Government	47
3.	Information about AIDS	49
B .	Sources of information	53
1.	Main sources	53
2.	Preferred sources	53
3.	Television	54
4.	Print material	57
5.	Family	59
6.	School	60
7.	Friends	60
8.	Doctor/nurse	61
9.	Church	62

C. Attitudes toward media and government	63
D. Provincial/territorial differences	64
E. Summary	65
V Attitudes toward AIDS and sexuality	
A. Introduction	66
B. People with AIDS or HIV infection	68
C. Homosexuals and homosexuality	72
D. Relationship between attitudes toward people with AIDS and toward homosexuality	75
E. Sexual permissiveness	76
F. Fear of AIDS and related attitudes	79
G. Provincial/territorial differences	80
H. Summary	81

VI Sexual behaviour	
A. Introduction	82
B. Sexual behaviour	84
1. Anal sexual intercourse	86
2. Homosexuality and bisexuality	86
C. Sexual relationships	90
1. Reasons for/against engaging in sexual intercourse	90
2. Duration of sexual relationships	92
3. Number of sexual partners	93
D. STDs	95
E. Characteristics of sexually and non-sexually active youth	96
1. Cigarette, alcohol and drug use	96
2. Other risk behaviours	97
3. Age	98
4. Gender	98
5. Educational aspirations	99
6. Church attendance	99
7. Attitude toward self and others	99
F. Attitudes	101
G. Worrisome outcomes of sexual intercourse	103
H. Protection	104
1. Condom use	104
2. Testing for AIDS and other STDs	105
I. Provincial/territorial differences	106
J. Summary	107

VII Street Youth

A. Introduction	108
B. Background	110
1. Defining street youth	110
2. Home background	112
3. Reasons for leaving home	113
C. Street life	115
1. Use of time	115
2. Meeting basic needs	115
3. Friends	116
D. Taking risks	118
1. Alcohol and drug use	118
2. Sexual history	120
3. Incidence of STDs	121
4. Protection measures	122
E. Knowledge and information sources	123
1. What they know and where they learn about AIDS and STDs	123
2. Preferred and least preferred sources of information	127
F. Attitudes toward sexual activity and condom use	129
1. Communicating about sex and condoms	129
2. Homosexuality and people with AIDS	130
G. Summary	131

VIII Summary, implications and recommendations

A. Introduction	132
B. Knowledge of AIDS and other STDs	133
C. Sources of information	134
D. Behaviour	135
E. Attitudes	136
F. High-risk youth	137
G. Implications for AIDS education	138
1. The role of the Government of Canada	139
2. Provincial/territorial educational programs	139
3. Parents and peers	140
4. College and university health services	140
5. Research	140
H. Concluding comment	141
Appendix	142
References	146

Table of Contents (cont'd)

Tables

Table 1.1	4
Classification of AIDS cases in the United States as of April 6, 1987	
Table 1.2	6
Health concerns of teens	
Table 1.3	7
Respondents	
Table 2.1	16
Relationship with parents	
Table 2.2	18
Church attendance	
Table 2.3	20
Self-esteem	
Table 2.4	22
Mental Health	
Table 2.5	23
Relationship with peers	
Table 5.1	66
Adult Canadians' views about homosexuals	
Table 6.1	85
Males and females who have had sexual intercourse (in percentages)	
Table 6.2	87
Sexual orientation of respondents (in percentages)	
Table 6.3	89
College/university students' responses to selected items, by sexual orientation (in percentages)	
Table 6.4	90
Reasons for not having sexual intercourse, by gender (in percentages)	
Table 6.5	91
Reasons given by dropouts and college/university respondents for first having sexual intercourse, by gender (in percentages)	
Table 6.6	92
Duration of sexual relationships of college/university students (in percentages)	
Table 6.7	96
Five or more alcoholic drinks at one sitting, by frequency of sexual intercourse (in percentages)	
Table 7.1	119
Frequency of and type of substance use (in percentages)	

Figures

Figure 1.1	3
Number of new AIDS cases in Canada 1982 to 1987	
Figure 1.2	3
AIDS cases reported by province as of August 29, 1988	
Figure 1.3	5
Number of reported cases in Canada of three sexually transmitted diseases: 1980-87	
Figure 1.4	7
Respondents by age (%)	
Figure 1.5	8
Grade 11 questionnaire sample page	
Figure 1.6	9
Themes of items that make up the six scales used in the study	
Figure 2.1	12
Respondents by gender (%)	
Figure 2.2	13
With whom respondents lived (Grades 7, 9 and 11)	
Figure 2.3	14
Parents' level of education	
Figure 2.4	15
Parents' occupation	
Figure 2.5	17
What my parent's think of me is important, by gender	
Figure 2.6	17
I ask my parents for advice on serious matters, by gender	
Figure 2.7	19
Educational aspirations of respondents	
Figure 2.8	20
I have confidence in myself, by gender	
Figure 2.9	21
I would change how I look if I could, by gender	
Figure 2.10	21
I need to lose weight, by gender	
Figure 2.11	22
I often cannot sleep worrying about things, by gender	
Figure 2.12	22
I often feel depressed, by gender	
Figure 2.13	24
My friends often ask me for help and advice, by gender	
Figure 2.14	24
If I have a problem, I usually keep it to myself, by gender	
Figure 2.15	25
I feel pressure from my friends to be sexually active, by gender	
Figure 2.16	25
I feel pressure from my friends to drink alcohol, by gender	
Figure 2.17	26
Alcohol consumption	
Figure 2.18	26
Usual number of alcoholic drinks at one time	
Figure 2.19	29
Cigarettes smoked per day	
Figure 2.20	29
Use of cannabis	
Figure 2.21	30
Use of other drugs by dropouts	
Figure 2.22	31
Weekly use of alcohol, by gender	
Figure 2.23	31
Five or more drinks at one time, by gender	
Figure 2.24	32
Relationship between self-esteem and mental health (Grade 11)	
Figure 2.25	33
Mental health compared with relationship with parents (Grade 7)	
Figure 2.26	33
Relationship with peers compared with relationship with parents (Grade 7)	
Figure 2.27	34
There are times I would like to leave home, by church attendance	
Figure 3.1	37
Knowledge of AIDS - definition	
Figure 3.2	38
Knowledge of AIDS - transmission	
Figure 3.3	39
Knowledge of AIDS - protection	
Figure 3.4	39
Knowledge of AIDS - myths	
Figure 3.5	40
Knowledge of STDs - definition	
Figure 3.6	41
Knowledge of STDs - transmission and protection	

Figure 3.7 Highest scoring group on AIDS knowledge, by hours of class time (Grade 9)	41	Figure 5.1 Attitudes toward people with AIDS or the AIDS virus	69	Figure 6.7 Number of sexual partners of dropouts, by gender	93
Figure 3.8 I need to know a lot more about AIDS, by gender	42	Figure 5.2 I could not be a friend of someone with AIDS, by gender	71	Figure 6.8 Substance use by dropouts and college/university respondents who have not had sexual intercourse compared with those who have had 11 or more sexual partners	94
Figure 3.9 AIDS and STD knowledge: ranges of correct responses in provinces/territories	43	Figure 5.3 Attitudes toward homosexuals and homosexuality	73	Figure 6.9 Dropouts and college/university respondents who have had a STD, by gender	95
Figure 4.1 Main sources of information about AIDS and other STDs (Grade 7)	51	Figure 5.4 Homosexuality is wrong, by gender	74	Figure 6.10 Alcohol use at least once a week, by frequency of sexual intercourse	96
Figure 4.2 Main sources of information about sex and birth control (Grade 7)	51	Figure 5.5 Grade 11: low, middle and high scoring groups on attitude-toward-homosexuality scale, by gender	74	Figure 6.11 Cannabis use, by frequency of sexual intercourse	96
Figure 4.3 Main and preferred sources of information about AIDS and other STDs (Grade 9)	52	Figure 5.6 Grade 11 scores on the attitude-toward-homosexuality scale compared with the attitude-toward-people-with-AIDS-or-HIV-infection scale	75	Figure 6.12 Cigarette use, by frequency of sexual intercourse	97
Figure 4.4 Main and preferred sources of information about sex and birth control (Grade 9)	52	Figure 5.7 Attitudes toward sexual permissiveness (Grade 11 and college/university)	77	Figure 6.13 Grade 9 respondents who expect to take risks in the future, by frequency of sexual intercourse	97
Figure 4.5 Main and preferred sources of information about AIDS and other STDs (Grade 11)	55	Figure 5.8 Attitudes toward sexual permissiveness, by gender	78	Figure 6.14 Respondents who have had sexual intercourse at least once, by age	98
Figure 4.6 Main and preferred sources of information about sex and birth control (Grade 11)	55	Figure 5.9 Fear of AIDS	79	Figure 6.15 Weekly church attendance, by frequency of sexual intercourse	99
Figure 4.7 Main sources of information about AIDS and other STDs (dropouts)	56	Figure 5.10 Homosexuality is wrong: ranges of responses in provinces/territories	80	Figure 6.16 Most positive relationship-with-parent scores, by frequency of sexual intercourse	100
Figure 4.8 Main sources of information about sex and birth control (dropouts)	56	Figure 6.1 Deep (open-mouth) kissing at least once, by gender	84	Figure 6.17 I have trouble saying "no", by frequency of sexual intercourse	100
Figure 4.9 Main and preferred sources of information about AIDS and other STDs (college/university)	58	Figure 6.2 Petting above the waist at least once, by gender	84	Figure 6.18 If I thought I had a STD, I would be embarrassed to go to a doctor or nurse, by frequency of sexual intercourse	101
Figure 4.10 Main and preferred sources of information about sex and birth control (college/university)	58	Figure 6.3 Petting below the waist at least once, by gender	85	Figure 6.19 Condoms interfere with sexual pleasure, by frequency of sexual intercourse	101
Figure 4.11 Attitudes toward government and media information about AIDS	53	Figure 6.4 Sexual intercourse at least once, by gender	85	Figure 6.20 I am worried about catching AIDS, by frequency of sexual intercourse	102
Figure 4.12 Television and school as main sources of information about AIDS: ranges of responses in provinces/territories	64	Figure 6.5 Dropouts and college/university respondents who have had oral or anal sex at least once, by gender	86	Figure 6.21 Outcome of sexual intercourse that worries respondents the most, by gender	103
Figure 6.6 Number of sexual partners of college/university respondents, by gender	93				

Figure 6.22	105	Figure 7.11	126
Use of condoms by dropouts and college/university respondents who have "often" had sexual intercourse, by gender		Street youth: main sources of information about AIDS and other STDs	
Figure 6.23	106	Figure 7.12	127
Sexual intercourse at least once: ranges of responses in provinces/territories		Street youth: preferred sources of information about AIDS and other STDs	
Figure 7.1	108	Figure 7.13	128
Age of street youth		Street youth: least preferred sources for information about AIDS and other STDs	
Figure 7.2	109	Figure 7.14	129
Type of street youth		Attitudes of street youth and school youth toward sexual intercourse and condoms	
Figure 7.3	114	Figure 7.15	130
A comparison between street youth and school youth and their relationship with parents		Attitudes of street youth and school youth toward people with AIDS	
Figure 7.4	117	Appendix	
A comparison between street youth and school youth on their relationship with peers		Table A.1	142
Figure 7.5	118	Number of Grade 7, 9 and 11 respondents by province/territory	
Frequency of substance use by street youth		Table A.2	143
Figure 7.6	120	Number of college/university respondents by province/territory	
Age of street youth at first sexual intercourse		Table A.3	144
Figure 7.7	121	Reliability of scales	
Street youth who contracted STDs		Figure A.1	143
Figure 7.8	122	Street youth sample, by centre	
Street youth: frequency of condom use for protection from STDs			
Figure 7.9	123		
AIDS knowledge of street youth and school youth			
Figure 7.10	124		
STD knowledge of street youth and school youth			

During the summer of 1987, the Federal Centre for AIDS (FCA) in conjunction with the National Health Research and Development Program (NHRDP) and Canadian Public Health Association (CPHA) initiated discussions with representatives from Canadian universities about determining how young Canadians were responding to the AIDS epidemic. The Social Program Evaluation Group of Queen's University agreed to undertake a study of this phenomenon within the context of adolescent sexuality. It was not until the design of the instruments was well underway that the Expert Interdisciplinary Advisory Committee on Sexually Transmitted Disease in Children and Youths negotiated with the research team to include STDs as an issue to be examined along with AIDS.

The research was funded by a grant from NHRDP, Health and Welfare Canada. There was a sense of urgency about the need for the study's findings; as a result the study was conducted under very restrictive time constraints and required a remarkably high degree of cooperation among members of the research team, external advisors, provincial and territorial coordinators and provincial health and education officials.

This study is focussed on the knowledge, attitudes and behaviour of Canadian young people with regard to AIDS and other STDs. This publication is directed primarily to individuals involved in health education and the promotion of health across Canada. The interpretation of the findings and suggested implications reflect only the views of the research team.

We have been selective in presenting the vast amount of information collected in order to produce a more readable report which should have greater impact. The *Canada Youth and AIDS Study: Technical Report* is available to those who are interested in more tabular data and greater detail about the research design and analysis.

The study was designed to produce findings on a national basis as well as for each province and the territories. Briefer reports for each province and the territories compare their results with the national data.

The research team was based at Queen's University. Alan King was responsible for overall supervision of the project and the preparation of the report. Wendy Warren, who coordinated the data collection and

assisted with report preparation, and Richard Beazley, who contributed to the survey design, conducted the pre-pilot interviews, and assisted with report writing, acted as project directors. Catherine Hankins provided advice on AIDS and STD knowledge in the field, and Alan Robertson on sexuality and health education; both helped with report writing. Jo-Anne Doherty, William Bowie and Noni MacDonald provided direction on the STD aspects of the study. Arthur Kraus consulted with the team about research design and Thomas Stroud about the sampling techniques. Joyce Radford conducted pre-pilot interviews, coordinated and conducted interviews with street youth and wrote Chapter VII; Matthew King handled sampling selection, computer programming, and data analysis; Beverley Coles assisted in coordinating the data collection, data preparation and editing; Ted King conducted street-youth interviews; Susan Eskerod conducted dropout interviews and assisted with editing; Christiane Jacques assisted with French data collection; and Marjorie Peart helped with editing and preparing copy for printing. Interviewers in each province, too numerous to name, also assisted in the data collection. Myrtle MacRae was responsible for the word processing and managed the budget. Frank Cerisano was responsible for graphics. Katherine Manley and Pierre Marchand prepared the translations of instruments and other documents. Hazel Fotheringham assisted with the editing and Peter Dorn designed the book.

Without the commitment and untiring efforts of the provincial and territorial coordinators, it would have been impossible to collect the data within the very tight time constraints. They are Robert Crocker in Newfoundland; Lyall Huggan, Prince Edward Island; Norman Watts, Nova Scotia; Barry Miller, New Brunswick; Pauline Bernatchez-Beaudoin, Quebec; Wendy Warren, Ontario; Dexter Harvey and Dawn White, Manitoba; Ray Petracek, Saskatchewan; Ernie Ingram and Frank Peters, Alberta, Inge Williams, British Columbia; Helen Balanoff, the Northwest Territories; and William Ferguson, the Yukon.

The study was conducted with the cooperation of educational administrators who obtained the approval we required to collect data in the institutions in their jurisdictions, and the teachers and post-secondary instructors who administered the questionnaires. Of course, the young people who so candidly expressed their views and described their behaviour were fundamental to the successful completion of this research.

Funding for the publication of this report was provided by NHRDP. We are grateful to Sheena Lee, Gregory Smith, Heidi Liepold and Barbara Jones for their support and encouragement.

November 1988

A. Background

The subject of this report is the knowledge, attitudes, and behaviour of over 38,000 Canadian youth (aged 11 to 21) with respect to Acquired Immunodeficiency Syndrome (AIDS) and other sexually transmitted diseases (STDs). Its purpose is to assist those developing and implementing appropriate educational and social programs to prevent the spread of these diseases among adolescents.

Many social scientists see the years between early adolescence and young adulthood as a period of considerable stress. Associated with the emotional and physical changes that accompany puberty, there is pressure to conform to peer values, and a need to establish some career direction at a time of great uncertainty. Most adolescents learn about themselves as they move toward independence by experimenting with their feelings, trying new activities and exploring alternatives. By acting impulsively or carelessly, they may knowingly or unknowingly damage their health.

In this report we examine the characteristics of Canadian youth, their social circumstances and how youth relate to one another and their parents. In doing so we describe their behaviours and try to determine the factors that influence their behaviour. What young people know about AIDS and other STDs is not particularly significant in itself. Knowledge does affect attitudes, however, and it can influence young people to consider seriously the risks inherent in sexual expression and in substance abuse. The objectives of our

What is AIDS?

AIDS stands for "Acquired Immunodeficiency Syndrome." Doctors first identified it in 1981. It is called "acquired" because a person catches or acquires the cause of AIDS from someone or something. AIDS is caused by a virus, discovered in 1983, called the Human Immunodeficiency Virus (HIV). The term "immunodeficiency" refers to the fact that the HIV attacks the immune system - the body's defense system - making it difficult for a person to fight off life-threatening infections. The term "syndrome" refers to the combination of signs and symptoms which when grouped together indicate that the patient has a certain illness - in this case AIDS. For example, the signs and symptoms of pneumonia in an immunodeficient patient usually indicate a rare lung infection which AIDS patients get frequently. It is due to a germ called *Pneumocystis carinii* and is called *Pneumocystis carinii* pneumonia (or PCP). Sometimes PCP appears alone but it may occur with a rare skin cancer called Kaposi's sarcoma or with other "opportunistic" infections which take advantage of the person's weakened immune system.

Not all people who are infected with HIV will necessarily get AIDS. Current information from one long-term study suggests that after seven years of infection about 30 to 35 percent of infected people have AIDS and 40-45 percent have symptoms of infection (fever, night sweats, weight loss, enlarged glands) but do not have AIDS. This leaves 20-30 percent of people without symptoms after seven years, and there is now documented evidence of individuals who remained well up to twelve years after infection.

No one knows exactly why some infected people get AIDS while others do not. But whether a person has symptoms or not, he or she is infectious to other people.

Importance of AIDS

No issue in recent times has provoked a greater public response, or had a more profound impact on our behaviour, than AIDS. Only two years ago in the Goldfarb Report, a study which tracks national behaviours and attitudes on an annual basis, Canadians ranked AIDS 19th on a list of issues of important national concern. This year, AIDS ranked first.

Four in 10 Ontarians say they are afraid to have any contact whatsoever with an AIDS patient, and one in five feels that children with AIDS should not be allowed to attend regular schools.

Two-thirds of Ontarians feel that, as a result of AIDS, we will be much less inclined in the future to accept premarital or extramarital sex. And more than two-thirds of those sampled believe that, as a result of AIDS, Canadians will be less inclined to use drugs intravenously or engage in homosexual practices.

The Toronto Star, June 25, 1988.

What a tragedy that our moral stupidity caused us to lose precious time, the greatest enemy in fighting an exponential spread, by downplaying the danger because we thought that AIDS was a disease of three irregular groups: minorities of life style (needle users), of sexual preference (homosexuals) and of color (Haitians). If AIDS had first been imported from Africa into a Park Avenue apartment, we would not have dithered as the exponential march began.

The New York Times Magazine, April 19, 1987.

The key words are "explosion" and "heterosexual population." Mathilde Krim, a research biologist and the outspoken co-founder of the American Foundation for AIDS Research, strongly believes that while the number of cases so far does not suggest an explosion, heterosexual transmission of the virus "can happen, and therefore it will happen, and the only thing we don't know is at what rate it will happen. The infection will spread in the general population."

C. Durkee, 1988, p. 107.

About one in every two Canadians fears AIDS will become epidemic among the general population, a new Gallup poll says.

Nearly half, or 48 percent, of Canadians believe acquired immunodeficiency syndrome will reach epidemic proportions despite extensive programs aimed at increasing public awareness about the sexually transmitted disease, according to results.

The Toronto Star, August 25, 1988.

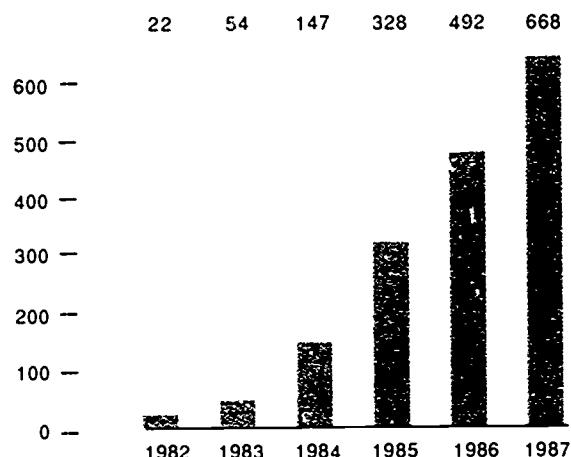
research were to understand the nature and the extent of young people's knowledge about AIDS, where and how they learn about it and about other STDs, and whether they internalize and integrate what they learn to manifest it in healthy behaviour. More specifically, we sought answers to the following kinds of questions. What do young people know about AIDS and other STDs? Has this knowledge affected their attitudes and behaviours? What are their attitudes toward persons with AIDS or HIV infection? How do they feel about themselves and their sexuality? To what extent are they sexually active, and what types of sexual activity do they engage in? What are their attitudes toward homosexuals? Do they smoke, drink alcohol, or use drugs? Does risk-taking behaviour in some health-related areas predict carelessness about sexual intercourse? Why do young people take risks?

B. Historical perspective

The number of AIDS cases in North America has risen dramatically since the first ones were reported in 1981. In September 1988, nearly 2,000 Canadians and more than 60,000 Americans were reported to have contracted the disease. Fifty-two percent of patients die within one year after diagnosis and 74 percent within two years (Royal Society of Canada, 1988). More alarming, the number of persons dying of AIDS compared with other causes of death is rising: preliminary data for Canada suggest that AIDS has moved from tenth place in 1985, for men aged 22 to 44 years, to fourth place in 1986. If current epidemiological trends remain constant (Figure 1.1), by 1992 AIDS could become the leading cause of death for men in this age group (Royal Society of Canada, 1988). The total number of AIDS cases by province is highly varied with the incidence highest in British Columbia, Quebec and Ontario (Figure 1.2).

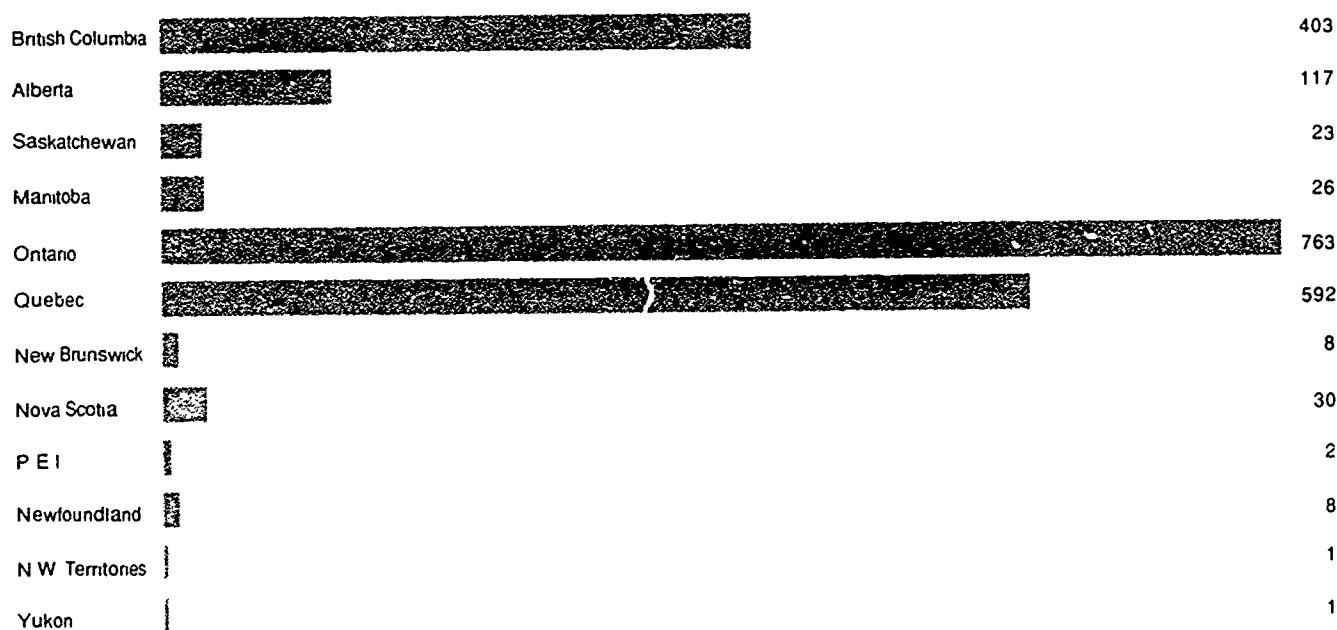
The first AIDS patients in North America were mostly homosexual males. Public health officials now believe it likely that the incidence of the disease among men who engage in sexual activity with other men has reached a peak. Increasing numbers of city-centred,

Figure 1.1
Number of new AIDS cases in Canada
1982 to 1987



Source: Health and Welfare Canada, Federal Centre for AIDS

Figure 1.2
AIDS cases reported by province as of August 29, 1988 (n = 1,974)



Source: Health and Welfare Canada, Federal Centre for AIDS

Table 1.1
Classification of AIDS cases in the United States as of April 6, 1987

Adult Cases	Number	%
Homosexual/bisexual males	21,874	68
Injection drug users	5,565	17
Homosexual males/injection drug users	2,550	8
Heterosexuals	1,270	4
Undetermined risk	1,053	3

Source Adapted from Greig, 1987, p. 10

AIDS: a worldwide epidemic

Since 1980 AIDS has become a serious global health problem with major socio-economic consequences, especially for many of the countries of the African continent. By March 1988 the World Health Organization had reported a total of 80,912 AIDS patients worldwide. This figure is an underestimate since facilities for reporting and the rigour with which reporting is enforced are not consistent throughout the world.

The number of patients reported as of March 1988 are: United States 54,233; Brazil 2,458; Canada 1,644; Australia and New Zealand 814; Europe 8,832 (led by France with 2,523). In these countries, homosexual/bisexual men form the largest proportion (59% in Europe and 65% in the United States), whereas the proportion of injection drug users varies markedly from country to country. Thus in Britain, Sweden and Denmark, fewer than 2% of patients are injection users, whereas in Spain and Italy they constitute 53% and 63% of the patients respectively. In the United States, 17% of persons with AIDS are injection users.

Royal Society of Canada, 1988, pp. 3-4.

injection drug users in the United States are contracting AIDS. These individuals currently are the major source of infection for transmission into the heterosexual population (Table 1.1).

Although on a world scale AIDS is predominantly a heterosexually transmitted disease, in North America the most common risk behaviours leading to infection remain unprotected anal intercourse between men and sharing of needles and syringes between intravenous drug users. There is some debate about the potential for a heterosexual epidemic in North America, given that the cause of AIDS and the methods of preventing transmission are now well known. Much depends on the extent to which protective changes in sexual behaviour and needle sharing are adopted by individuals who place themselves at risk.

Concern is also growing about sexually transmitted diseases which are increasing in young women and men. There is a similarity between HIV and other sexually transmitted infection. Individuals can be unaware of being infected by both diseases, and the consequences can be delayed and extremely serious. HIV can of course be devastating leading to AIDS and eventually death; chlamydia and gonorrhea, as a result of pelvic inflammatory disease, can both lead to infertility, chronic pelvic pain and ectopic or tubal pregnancy (i.e., the foetus grows outside the womb and dies causing possible death of the mother).

Although the number of reported cases of gonorrhea among Canadian men and women has been declining in recent years, the rate in girls age 15 to 19, who already have the highest rate among all women, continues to rise. STD researchers consider chlamydia and chlamydia-associated conditions have reached alarming proportions; it should be noted that chlamydia is not a nationally reported infection. Figure 1.3 illustrates the trends in the reported incidence over the past several years of three prevalent sexually transmitted diseases, but inadequately represents chlamydia. Data collected in 1987 show that chlamydia is much more frequent than gonorrhea among young women (Health and Welfare Canada, 1988).

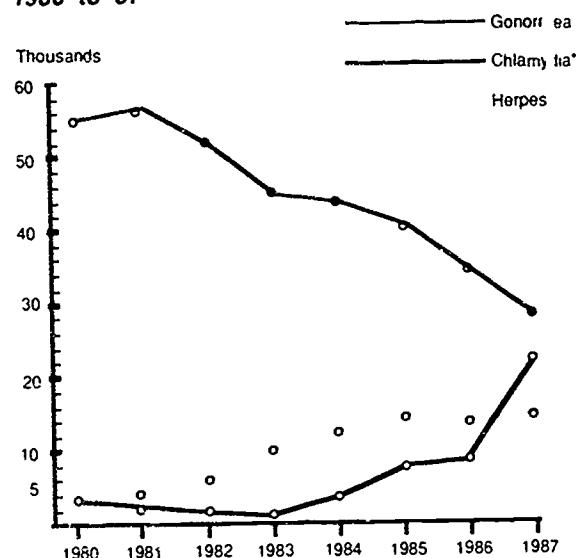
C. Rationale for the study

A vaccine to prevent infection and a cure for AIDS are not expected for several years. It has often been stated that the primary strategy available to control and eventually reduce the spread of the human immunodeficiency virus is education of the general population and particularly of individuals most likely to engage in behaviour that places them at risk of contracting or transmitting the virus.

Those studying AIDS have identified Canadian adolescents as potentially at risk for HIV infection. They have been singled out to be educated about AIDS for two reasons. First, adolescents face pressure to use drugs, especially alcohol, that impair their judgement and ability to make decisions at a time when they are beginning to be sexually active. This combination tends to lead to unplanned sex without protection. Second, the incidence of AIDS is relatively high among 20- to 29-year-olds. The disease has an incubation period of up to seven or more years, and some of the people with AIDS in their twenties are thought to have contracted the virus during their teen years.

Adolescents admit they are concerned and that they need more information about AIDS. Surveys conducted in Ontario and Alberta in 1987 indicate that almost

Figure 1.3
Number of reported cases in Canada of three sexually transmitted diseases:
1980 to 87



*The 1987 increase in chlamydia is partly due to an increase in reporting laboratories

Source: Laboratory Centre for Disease Control, Health & Welfare Canada, 1988

Young people and STDs

If AIDS [and other STD] programs launched in high schools across Canada during the fall of 1987 don't soon get the message across about safe sex, teenage girls 15 to 19 years of age will become the group with the highest rate of gonorrhea in Canada within the next couple of years.

The Medical Post, April 26, 1988, p. 5.

AIDS: a threat to young people

The House Select Committee on Children, Youth and Families says in its report that AIDS is rapidly emerging as a major health threat to infants, children and adolescents. *The Toronto Star*, December 7, 1987.

A host of psychological, developmental, and societal factors influence young people, and these influences can weaken or block precautions essential for preventing the transmission of HIV. ... Unfortunately, the AIDS epidemic still isn't real to many young Americans who live in regions where HIV infection is less prevalent. They believe that AIDS is a concern only for "other people." For them, the myth that AIDS is just a gay disease dies hard.

R.P. Keeling 1987, p. 22.

Table 1.2
Health concerns of teens (n=500)

	%
AIDS	71
Cancer	5
Sexually transmitted diseases	3
Drug abuse	2
Lung disease	2
Other	7
None	4
Do not know/not stated	9

Source: *The Alberta AIDS Survey, 1987*

Young people's knowledge of AIDS

The findings suggest that students possess some knowledge of AIDS – although this knowledge is uneven. ... With respect to disease transmission, 92 per cent of the students correctly indicated that "sexual intercourse was one mode of contracting AIDS," however, only 60 per cent were aware that "use of a condom during sexual intercourse may lower the risk of getting the disease." This large discrepancy suggests that many adolescents, while knowing a major route of disease transmission, nonetheless, will be engaging in unprotected sexual activity.

R.J. DiClemente, J. Zorn, and L. Temoshok, 1986, p. 1443.

As a whole, the students do not possess a high level of AIDS knowledge. Those with the highest level of knowledge still only answered 47% of the questions correctly. None of the sources singly provided the students with adequate knowledge, so a combination of sources seems desirable.

J.H. Price, S. Desmond, and G. Kukulka, 1985, p. 108.

The results [of this survey] give us fresh insight concerning what our nation's teenagers know and how they act concerning health and sex related issues – but they also show that too many young people, even when they know better, don't always make the right health decisions.

National Adolescent Student Health Survey, 1988, p. 2.

The schools, either did nothing and "... waited for guidelines or new curricula to be passed down or took action ranging from staging single lectures, through integrating AIDS material into existing STIs units, to developing their own curricular plans."

Canadian Public Health Association, 1987, p. 2.

three-quarters of young people believed AIDS was the most prominent health issue Canadians face (Table 1.2).

Young people have been confused by the information available to them about AIDS. Studies in the United States have indicated that teenagers had many misconceptions about AIDS, despite media attention to AIDS and to the subject of "safe sex" or "safer sex." Fifty-seven percent of American teens in one such study were sexually active, only one-third of them used contraceptives consistently, and 27 percent reported never using contraceptives (Wattleton, 1987).

No comparable studies had been done to determine what Canadian teenagers knew, believed and did about AIDS. Prior to September 1987, information about it reached them haphazardly. Young people learned about it from media sources, particularly television. Parents, most of them also uninformed about the disease, could not help their children understand it. The schools had done relatively little. However, by the fall of 1987 most provincial governments had designed AIDS curricula. Implementation was underway in many elementary and secondary schools at the time this study was undertaken.

The universal anxiety created by AIDS, the belief in education as the primary means by which to control or reduce the spread of HIV infection, the perceived vulnerability of youth for future HIV infection, and the lack of data concerning Canadian adolescents' knowledge, attitudes and behaviours with respect to AIDS all provided a compelling rationale for the *Canada Youth and AIDS Study*.

Table 1.3
Respondents

	Male	Female	Total*
Grade 7	4,958	4,920	9,925
Grade 9	4,677	5,143	9,860
Grade 11	4,482	5,115	9,617
Dropouts	576	444	1,033
College/ university	2,840	4,044	6,911
Street youth	357	299	656
Total	17,890	19,965	38,002

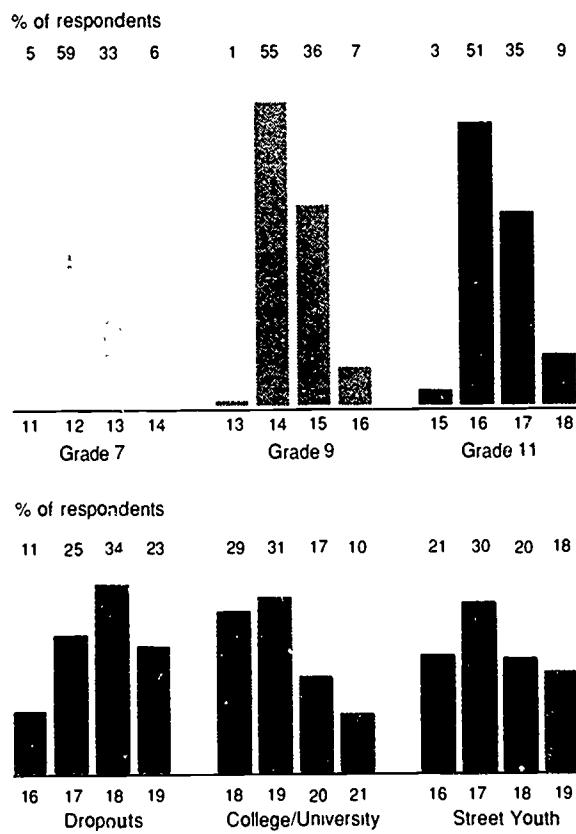
*Discrepancies are due to missing gender responses

D. Research design

1. Sample

In order to obtain a cross-sectional perspective of the development of knowledge, attitudes, and behaviours related to AIDS and other STDs, we surveyed over 38,000 young people in Grades 7, 9, 11 and first year college and university (in Quebec, Secondary 1, 3 and 5, second year CEGEP and first year university). Included in the total were also those who had recently dropped out of full-time attendance at school, and those who spend most of their time on the streets of large cities (Table 1.3). These young people ranged in age from 11 to 21 years of age. Figure 1.4 shows the percentage of the respondents by age.

Figure 1.4
Respondents by age (%)*



* Respondents above and below these age groups are excluded here

Figure 1.5
Grade 11 questionnaire sample page

PART B: Sources of Information

KEY		
01 = Television	08 = Mother	14 = Personal experiences
02 = Radio	09 = Father	15 = School (Teachers)
03 = Magazines	10 = Other family	16 = Church (Synagogue, etc)
04 = Newspapers	member	17 = Community Health Clinic
05 = Pamphlets	11 = Friends	18 = Telephone "Hotline"
06 = Books/Journals	12 = Nurse	19 = Other (please specify)
07 = Videos/Movies	13 = Doctor	

Please use the KEY above to answer the following two questions.

13 What have been your two main sources of information about the following? (Use the grey boxes)

14 From where or whom would you prefer to learn about the following? (Use the clear boxes)

a) Sex	1st	<input type="checkbox"/>	<input type="checkbox"/>	2nd	<input type="checkbox"/>	<input type="checkbox"/>
b) Birth control	1st	<input type="checkbox"/>	<input type="checkbox"/>	2nd	<input type="checkbox"/>	<input type="checkbox"/>
c) AIDS	1st	<input type="checkbox"/>	<input type="checkbox"/>	2nd	<input type="checkbox"/>	<input type="checkbox"/>
d) Other sexually transmitted diseases -- STDs (e.g. syphilis, gonorrhea, chlamydia, and herpes)	1st	<input type="checkbox"/>	<input type="checkbox"/>	2nd	<input type="checkbox"/>	<input type="checkbox"/>
15 Over the past two school years, about how many hours of class time have you spent learning about AIDS?	Hours	<input type="checkbox"/>				

2. Instruments

Each of the six survey instruments contained questions about respondents' background (age, gender, socio-economic status, parents' origin); sources of information (on sex, birth control, AIDS, other STDs, Figure 1.5); behaviours (use of alcohol, tobacco, and other drugs; sexual activity); and knowledge about AIDS and other STDs. The items about respondents' knowledge of AIDS were designed so that sub-topic scores on transmission and prevention, for example, could be obtained for each student. Items about attitudes were designed to be combined into scales on self-esteem, relationship with parents and peers, mental health, and attitude toward persons with AIDS and homosexuals (Figure 1.6). Other items were designed to provide a picture of the perceived effectiveness of communication from the government, media, school, medical personnel and the home regarding sexuality, AIDS, and other STDs. The items were developed in collaboration with advisors considered to be knowledgeable about AIDS and other STDs and with the advice of officials from the Federal Centre for AIDS and the Laboratory Centre for Disease Control.

E. Interpreting the findings

A simple rule of thumb can be used when assessing the statistical significance of differences between two groups of respondents. A difference of five percent between two measures (e.g., the proportion of females and males who have never had sexual intercourse) can be considered statistically significant at the 95 percent level of confidence. The likelihood that any stated percentage of responses from a particular group in the sample represents the population from which it was drawn is ± 4 percent at a 90 percent level of confidence.

Except for the provincial analyses, the percentages reported in tables and figures are derived from numbers weighted to take into account differences in each province's population of Grades 7, 9 and 11. The percentages for dropouts, street youth and post-secondary students represent actual proportions of respondents. The surveys were conducted in English and French depending on the main language of the respondents, but the results do not show language differences.

More detail about the design of the study is provided in the Appendix and another volume called the *Canada Youth and Aids Study: Technical Report*. Statistical procedures used to establish the validity and reliability of the scales are described in the Appendix. The technical report includes all of the major tables and figures produced for the study.

Figure 1.6

Themes of items that make up the six scales used in the study

Relationship with parents

- parents' expectations
- satisfaction with home life
- communication with parents
- value of parents' viewpoint
- trust between parents and young people

Relationship with peers

- number of friends
- friends as a source of advice
- ease with friends of the opposite sex

Attitude toward people with AIDS

- students or teachers with AIDS
- befriending a person with AIDS
- persons with AIDS serving the public
- quarantining people with AIDS

Attitude toward homosexuality

- acceptability of homosexuality
- homosexuals as teachers
- ease with homosexuals

Self-esteem

- acceptability of self, action
- self-confidence
- decisiveness

Mental health

- degree of frustration, loneliness
- degree of happiness
- sleeplessness because of worry
- suicidal tendencies
- optimism about the future

F. Organization of the report

The study is organized according to a series of themes, each building on the other as we progress to the implications of the research. In Chapter II, we describe the young people's characteristics and examine those most likely to help in understanding their sexual behaviour. We also describe their relationship with their parents and their friends, and how they feel about themselves.

Chapter III focusses on what respondents know about AIDS and other STDs and the accuracy of their knowledge. Chapter IV reviews from whom and where young people have learned about sex, birth control, STDs, and AIDS. In this chapter we trace the main sources of their knowledge and where they would prefer to get the facts.

In Chapter V we examine young people's attitudes toward persons with AIDS or HIV infection and homosexuals and homosexuality, and the influence of self-esteem, mental health and relationships with friends and parents on their attitudes. In Chapter VI, we document the sexual behaviours of young people and consider factors that influence these behaviours.

We describe what we learned during face-to-face interviews with street youth across Canada in Chapter VII, and compare their knowledge and attitudes to those of the 16- to 19-year-old group of young people in schools and colleges/universities.

In the final chapter we identify the young people at greatest risk and explore the implications of the main findings, and suggest educational initiatives and social interventions.

The report uses a double-column format. Text, which identifies and interprets key findings appears as the inside column on each page. References from the literature, tables and figures reporting the findings, and respondents' comments are displayed in the other column. The comments originated in focus group interviews which took place during the early pilot phase of the study.

II Characteristics of adolescents surveyed

A. Introduction

It has always been vitally important to identify the adolescents who risk their health by engaging in dangerous activity so that appropriate educational interventions may be developed. The advent of AIDS has increased the potential harm of some activities, making it essential that we learn what we can about the youth who take risks and about how they jeopardize their health.

In this chapter we describe the characteristics of the adolescents surveyed. As indicated in the previous chapter, the sample is large and varied and the instruments extensive; they allow us to examine many different characteristics of young Canadians and to show associations between these characteristics in some detail. We have chosen to concentrate on age, gender, family background/living arrangements, educational aspirations, church attendance, self-esteem, mental health, relationship with parents and relationship with peers, and use of drugs, alcohol and tobacco.

Adolescence

Adolescere (Latin): to grow up

Adolescence: n. the period of physical and psychological development from the onset of puberty to maturity. The Houghton Mifflin Canadian Dictionary, 1980.

In spite of our efforts to place students in groupings for analysis, we were struck by the remarkable differences among them in aspirations, backgrounds, personality characteristics and relationships with others.

A.J.C. King, 1986, p. 34

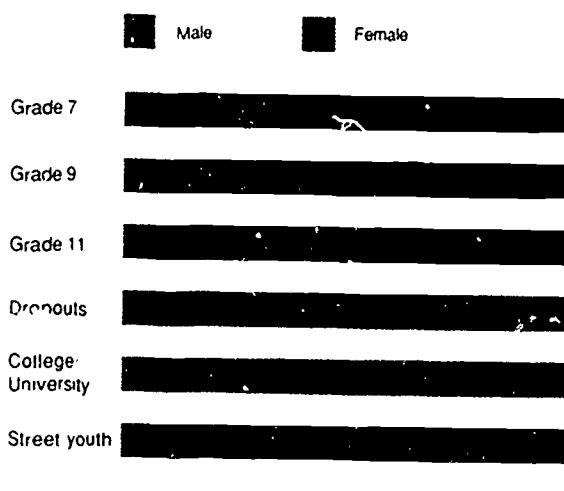
Adolescence ... is that longer transition from childhood to adulthood that begins with puberty but lasts several years and is perhaps the more descriptive of social and emotional change than of physical. Most traditional societies simply cannot afford the luxury of so long a transition to adulthood. Hence, adolescence is largely a product of wealthy Western, urban societies ... adolescence in contrast to puberty is largely a social phenomenon.

H. Parry, 1982, p. 16

Some of our most cherished beliefs about adolescence are myths. Explanations of the behaviour of youth, the origin of adolescence, and the extent of the generation gap are often based on assumptions rather than on a critical examination of historical literature and contemporary research.

M.L. Manning, 1983, p. 823

Figure 2.1
Respondents by gender (%)



The way age and gender relate to behaviours and attitudes is evident throughout the report, and we draw attention to them when they are particularly significant. (See male/female breakdown of sample in Figure 2.1.) The following descriptions of the characteristics and social adjustment of young Canadians provide the background to the discussion, presented in later chapters, of their knowledge, behaviour and views with regard to AIDS and other STDs.

First we discuss the respondents' home background including their relationship with their parents. A discussion about church attendance follows, and then the personal characteristics of the respondents are described with particular attention given to self-esteem, mental health and relationship with peers. The data on use of alcohol, tobacco and other drugs indicate the proportion of respondents in each age group surveyed who risked their health by engaging in potentially harmful non-sexual activities. Finally, we discuss the interrelationships between certain characteristics. This information will allow us, in later chapters, to describe more precisely those who take risks.

B. The home

1. Living arrangements

Seventy-five percent of the Canadian youth surveyed in Grades 7, 9 and 11 lived with their mother and father (Figure 2.2). Sixteen percent lived with only their mother or with their mother and stepfather compared with four percent who lived with only their father or their father and stepmother. Guardians and others provided a home for five percent of these young people.

Perhaps surprisingly, 53 percent of the Canadian college/university students in the sample lived with their families or relatives. Nineteen percent lived with friends, ten percent with a roommate in residence, and 11 percent lived by themselves in an apartment or residence. The remainder indicated other living arrangements.

Seventy-three percent of the young people who had dropped out of full-time attendance at school continued to live with their families. A few of them lived with relatives (6%), a boyfriend/girlfriend (6%) or with friends (6%); and very few of them lived alone, or with a spouse.

Home background

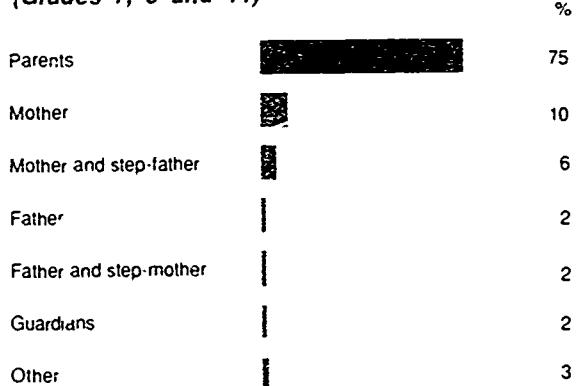
Teens who are socially, economically, or ethnically disadvantaged tend to begin sexual activity at an earlier age - and to be less likely to use contraceptives when they do have sex. The poll identified several specific factors that increase teens' risk: coming from a family of lower socioeconomic status, having below-average grades or not attending school at all, being unemployed, living with only one parent, and having parents who are not college graduates.

F. Wattleton, 1987, p. 379

Of the four major contexts of adolescent life - solitude, family, peers, and school - the family plays in many ways the most important role. Financially and legally, if not emotionally, adolescents still depend on their parents for basic survival necessities and self-definition.

M. Csikszentmihalyi and R. Larson, 1984, p. 129

Figure 2.2
*With whom respondents lived**
(Grades 7, 9 and 11)



* The figures were within 1% for each grade level

2. Parents' occupation and education

The parents of the younger respondents were reported to have a slightly higher level of education (Figure 2.3). The parents of dropouts had the least post-secondary education.

The occupations of mothers and fathers of the five samples of respondents can be seen in Figure 2.4. Differences were surprisingly small among the five groups in the occupations of their parents although fewer parents of dropouts were reported to be in the professional category.

Figure 2.3
Parents' level of education

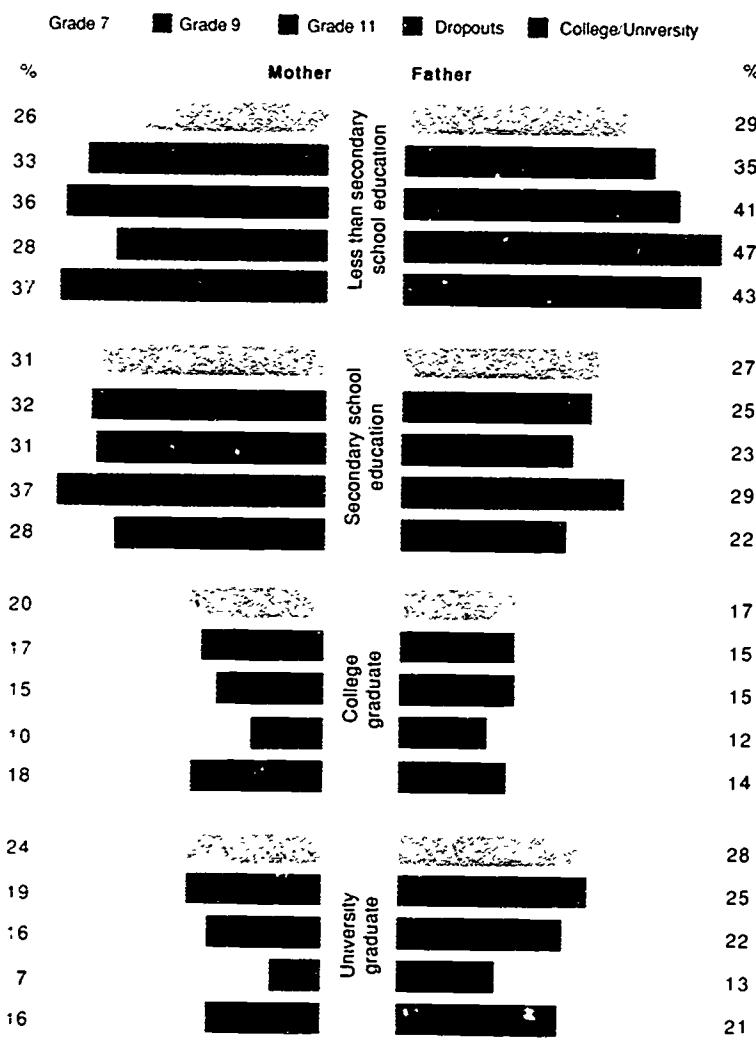
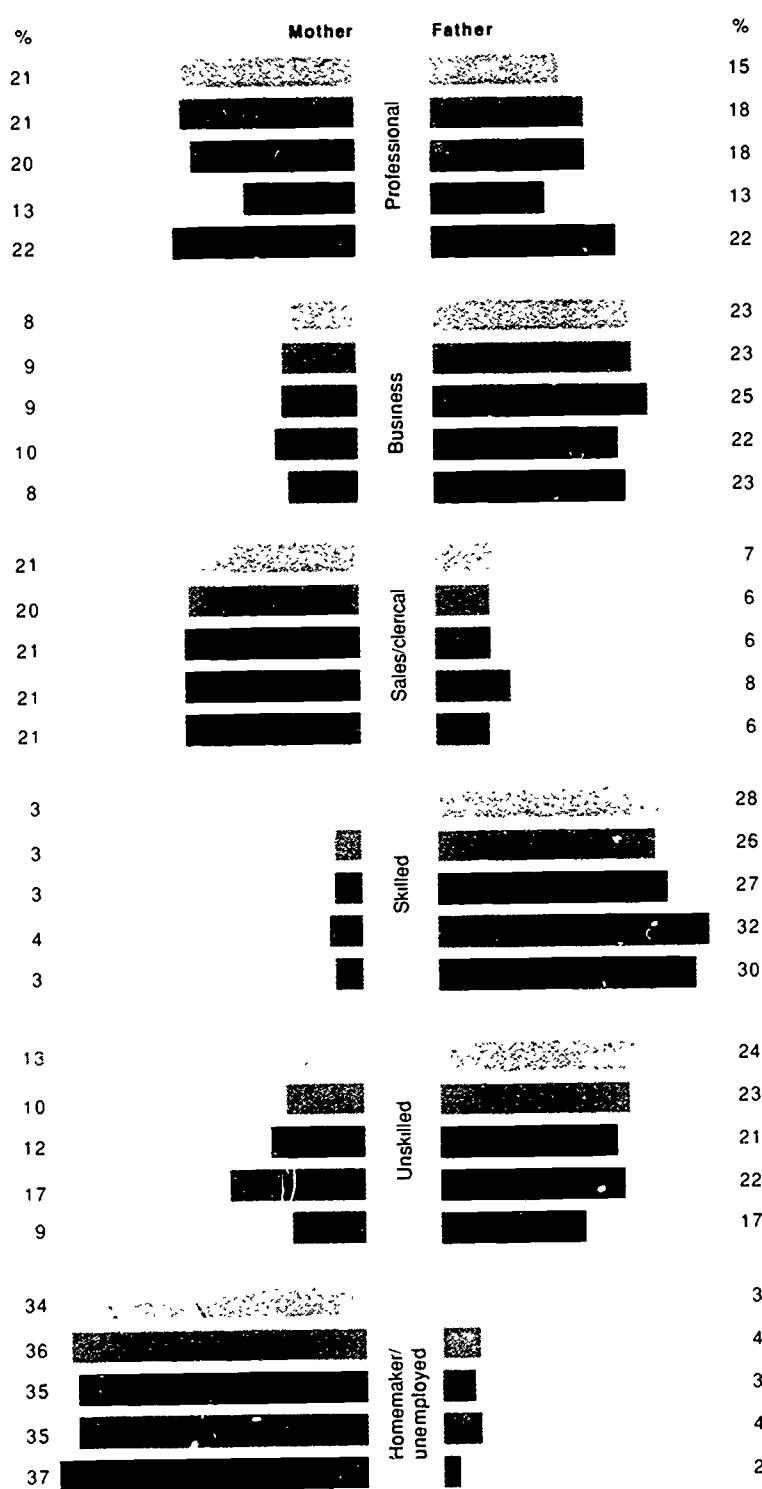


Figure 2.4
Parents' occupation

Grade 7 Grade 9 Grade 11 Dropouts College/University



Relationship with parents

Somehow, the family appears to have difficulty complementing the freedom-mindedness of emerging teenagers, even though, ironically and perhaps tragically, young people so highly value companionship and love.

R.W. Bibby and D.C. Posterski, 1985, p.25.

Our results have shown the presence of a familial aggregation in various lifestyle components of the Canadian population. ... Correlations computed among family members indicate that people who live together tend to have similar physical activity habits and health practices.

L. Pérusse, C. Leblanc, and C. Bouchard, 1988, p. 204.

Table 2.1
Relationship with parents (% agreed)

Attitude statements	Grade			Drop-outs	College/University
	7	9	11		
Even when my parent(s) are strict, I feel they are being so for my own good.	78	63	67	*	*
My parent(s) understand me.	70	58	58	63	67
I have a lot of arguments with my parent(s).	30	35	33	40	*
What my parent(s) think of me is important.	87	80	86	84	89
There are times when I would like to leave home.	46	48	56	*	*
I have a happy home life.	80	76	75	*	*
I would raise my children differently from the way I was raised.	31	36	35	44	32
My parent(s) expect too much of me.	29	33	32	30	19
I ask my parent(s) for advice on serious matters.	59	49	51	60	59
My parent(s) trust me.	82	71	73	74	84

*Not asked.

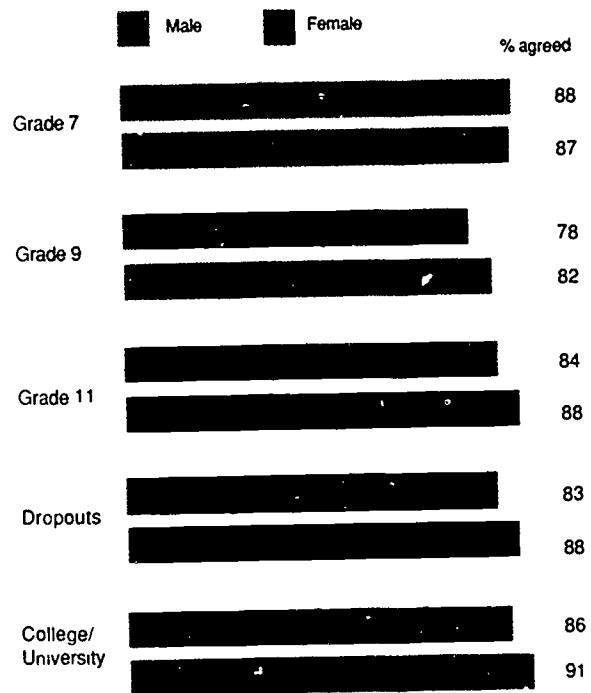
3. Relationship with parents

It is now well established by research that adolescents tend to choose values and expectations quite similar to those of their parents. Specifically, parents play a much greater role in decisions with long-range consequences than do peers.

Our relationship-with-parents scale included up to ten items concerning understanding, trust, discipline, expectations, arguments, home life, and parents as advisers on serious matters. Most teens were reasonably content with their home life, their parents and the relationship they have with them (Table 2.1). At least three-quarters of them reported they had a happy home life and similar proportions felt trusted by their parents.

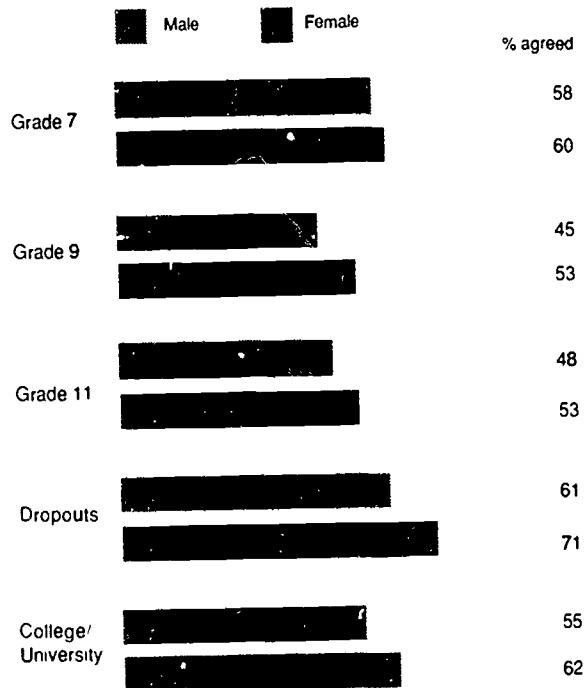
By contrast, almost one-half reported there have been times when they would like to have left home, one-third reported they have had a lot of arguments with parents, and one-third, except for dropouts (44%), would raise their children differently from the way they were raised.

Figure 2.5
What my parents think of me is important, by gender



We found little difference in the views of the males and females surveyed regarding relationship with parents. The slight differences suggested that females had better relationships with parents than did males, especially during late adolescence. For example, Figure 2.5 illustrates that the younger males and females were equally likely to report that what their parents think of them was important; whereas, starting in Grade 9, slightly more older females than older males reported this. The same pattern is shown in Figure 2.6.

Figure 2.6
I ask my parents for advice on serious matters, by gender



Young people and religion

As recently as the 1960s, the secularization of North America seems obvious. Plummeting church attendance, experienced first by Protestants and then by Roman Catholics, seemed predictable in a society in which the phrase "God is dead" sounded appropriate.

R.W. Bibby and D.C. Posterski, 1985, p. 115

The relationship between sexual decision making and religiosity was confirmed for both males and females. As might be expected the more religious the individual, the more important were the opinions of others - parents, peers, and religious leaders. The more religious individuals were less influenced by hedonistic self-gratification through sexual intercourse, and conversely, the less religious were more influenced by this factor.

A.M. Juhasz and M. Sonnenschein-Schneider, 1987, p. 586

C. Church attendance

Church attendance has fallen in recent years throughout North America and young people today are less likely than those of previous generations to go to church.

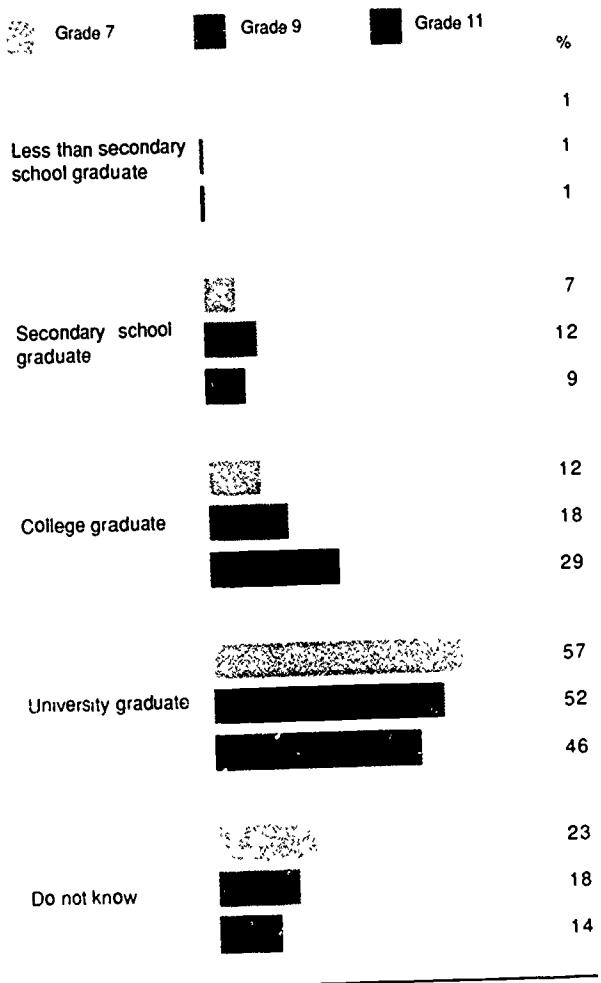
Approximately one-quarter of the young people in school never attended church. For the dropouts this figure was 45 percent. The proportion of respondents who attended weekly decreased among older respondents (Table 2.2).

Table 2.2
Church attendance (%)

Frequency	Grade			Drop-outs	College/ University
	7	9	11		
Weekly	28	24	21	10	20
Now and then	25	21	19	17	21
Special occasions	24	28	31	28	34
Never	23	27	29	45	25

We compared church attendance to other variables in young people's lives and discuss, in section F, these relationships.

Figure 2.7
Educational aspirations of respondents



D. Personal characteristics

1. Aspirations

As young people move from Grade 7 to Grade 11 their goals become clearer and their educational aspirations change (Figure 2.7). The proportion of students choosing college graduation as an appropriate goal, rather than university, indicates perhaps that they are also becoming more realistic in terms of their interests and aptitudes.

2. Self-esteem

The terms "self-concept" and "self-esteem" are often used interchangeably, although, strictly speaking, self-concept refers to an individual's description of his/her abilities, personality and relationships with others, and self-esteem refers to the value an individual places on these personal characteristics. In their attempts to understand why young people endanger their health, researchers have found a strong relationship between low self-esteem and unsound lifestyle habits.

Beginning with the self-esteem items used in our previous study, the *Canada Health Attitudes and Behaviours Survey*, and based on further testing of these and other items, we developed a scale of seven items dealing with decision-making, appearance, confidence, and feelings of regret over personal actions. We assumed that respondents placed similar value on these attributes, and that the extent to which they believed they possessed them was a valid measure of self-esteem.

Defining self-esteem

Self-concept refers to the description we hold of ourselves based on the roles we play and personal attributes we believe we possess. Self-esteem refers to the level of satisfaction we attach to that description or parts of it.

J.A. Beane et al., 1980, p. 84

Figure 2.8
I have confidence in myself, by gender

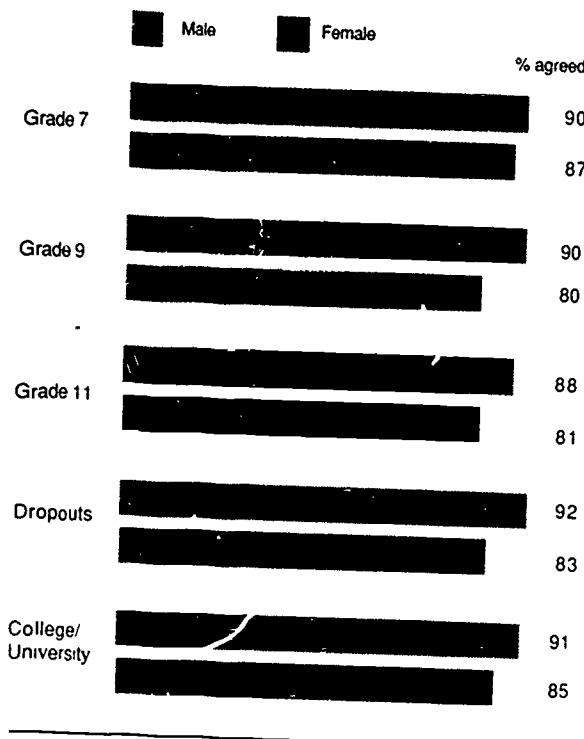


Table 2.3 represents the percentage of respondents who agreed with items on the self-esteem scale. On two items, "I have confidence in myself" and "I like myself," there was little variation from one age group to the next. At least 80 percent of respondents in each age group agreed with these statements. Overall, college/university respondents demonstrated higher self-esteem than did respondents in any other age group. Dropouts felt as positive about themselves as did in-school respondents in Grades 7, 9 and 11.

Table 2.3
Self-esteem (% agreed)

Attitude statements	Grade			Drop-outs	College/ University
	7	9	11		
I often am sorry for the things I do.	63	54	49	50	36
I have confidence in myself.	89	84	85	88	87
I have trouble making decisions.	34	24	27	32	24
I would change how I look if I could.	44	46	44	32	33
I often wish I were someone else.	38	34	27	18	15
I like myself.	85	80	85	91	90
I often feel left out of things.	34	32	30	*	21

*Not asked.

When percentages of respondents who agreed with self-esteem items overall were compared by gender, however, males consistently demonstrated higher self-esteem than females in each age group. For example, a higher percentage of males were self-confident (Figure 2.8).

This gender difference is illustrated to a greater degree in Figure 2.9. Researchers have suggested that feeling secure about one's appearance is related to self-esteem; consequently, the strength of the desire to change physical appearance is an index of how people feel about themselves. The fact that nearly twice as many young females as males believed they needed to lose weight emphasizes further these gender differences (Figure 2.10).

Figure 2.9
I would change how I look if I could, by gender

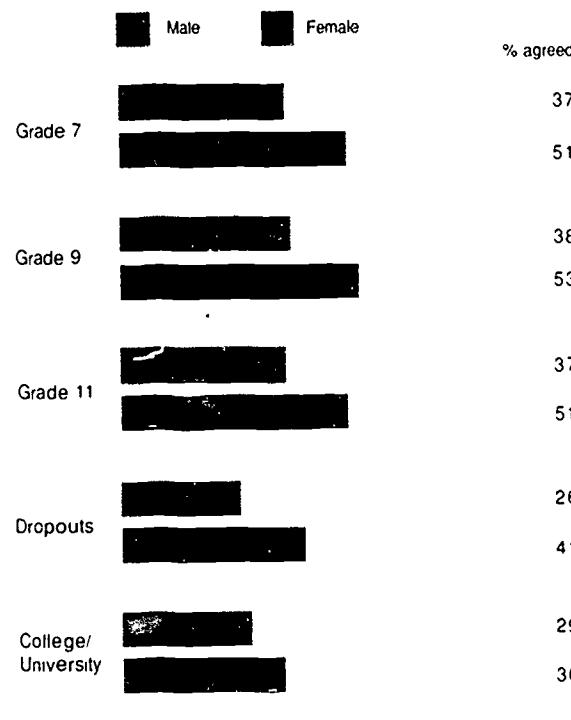


Figure 2.10
I need to lose weight, by gender

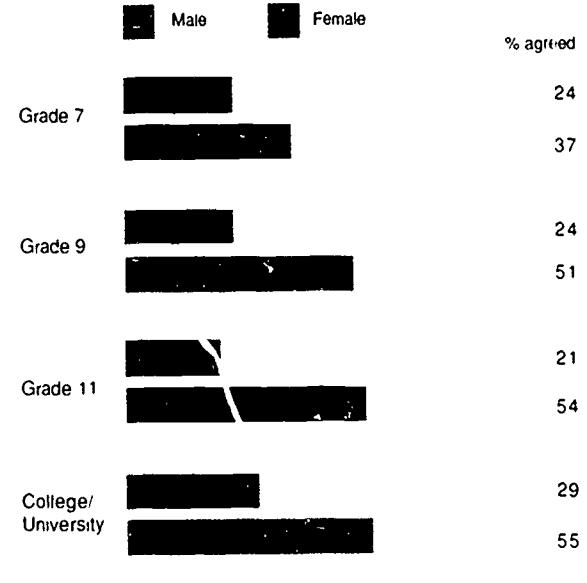
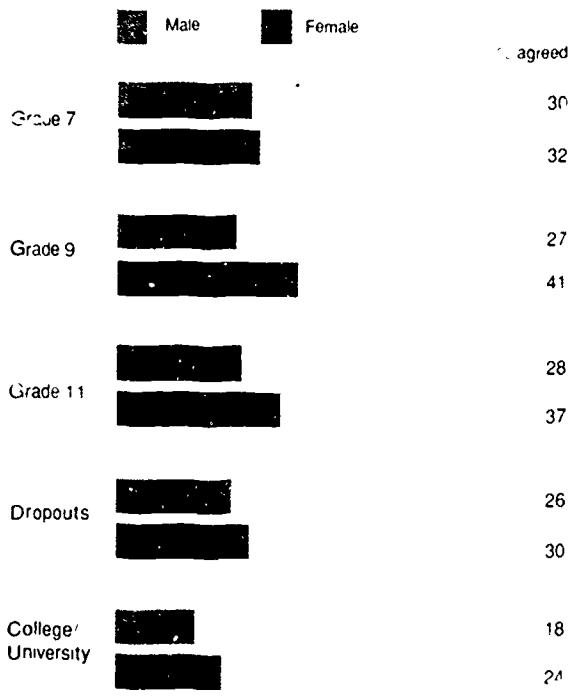


Figure 2.11
I often cannot sleep worrying about things, by gender



Figure 2.12
I often feel depressed, by gender



3 Mental health

Table 2.4 summarizes our findings regarding the mental health of participants. Even though most respondents reported "being a happy person" and agreed "the future looks good," 19 to 34 percent of them often felt "lonely," "left out of things" and "depressed," "sometimes thought about committing suicide," and "viewed life as just one worry after another." The college/university respondents demonstrated better mental health than those in other age groups.

Young Canadian males, compared to females, seemed to have slightly better mental health. The most extreme example of this gender difference showed up on the item, "I often cannot sleep worrying about things" (Figure 2.11). A more representative example of the similarity between the way males and females responded to questions about mental health is given in Figure 2.12.

Table 2.4
Mental health (% agreed)

Attitude statements	Grade			Drop-outs	College/University
	7	9	11		
I am a happy person.	81	83	84	88	87
I often cannot sleep worrying about things.	41	38	41	*	39
I often feel lonely.	34	33	31	29	25
I often feel left out of things.	34	32	30	*	21
I often get tru**rated.	60	61	60	62	50
I often feel depressed.	31	34	32	27	21
I sometimes have thoughts about committing suicide (killing myself).	23	26	26	22	19
Life is just one worry after another.	29	34	32	*	24
The future looks good to me.	73	74	71	*	77
No one cares much about what happens to me.	20	11	8	10	4

* Not asked

4. Relationship with peers

The overriding relationship issue for adolescents is acceptance by peers, which offers a sense of emotional sustenance or reassurance at a time when familial ties may be weakening. Peers provide emotional support to adolescents who tend to be unsure of themselves. Experts generally agree that adolescents' social activity is directed mainly by peer opinion, but their vision of their life goals is determined more by family members.

The relationship-with-peers scale had nine items for in-school respondents, five of which were included in the survey of dropouts. The items were concerned with having a lot of friends, having close friends with whom to talk, relationships with the opposite sex, and being in tune with peers (Table 2.5). In addition to these scale items, there were four to six items related to peer pressure.

Table 2.5
Relationship with peers (% agreed)

Attitude statements	Grade			Drop-outs	College/ University
	7	9	11		
I have a lot of friends.	84	86	89	88	87
I talk about sex with my close friend(s).	56	68	75	•	78
If I have a problem, I usually keep it to myself.	35	35	42	42	37
I discuss my problems with my friends.	62	71	67	73	77
I am embarrassed when I am with someone of the opposite sex.	19	15	12	•	7
I am too shy to make a lot of friends.	13	16	16	•	15
People of the opposite sex seem to like me.	51	62	73	•	82
My friends often ask for help and advice.	63	76	72	78	75
I do not have much in common with people of my age.	26	14	16	33	13

• Not asked.

Relationship with peers

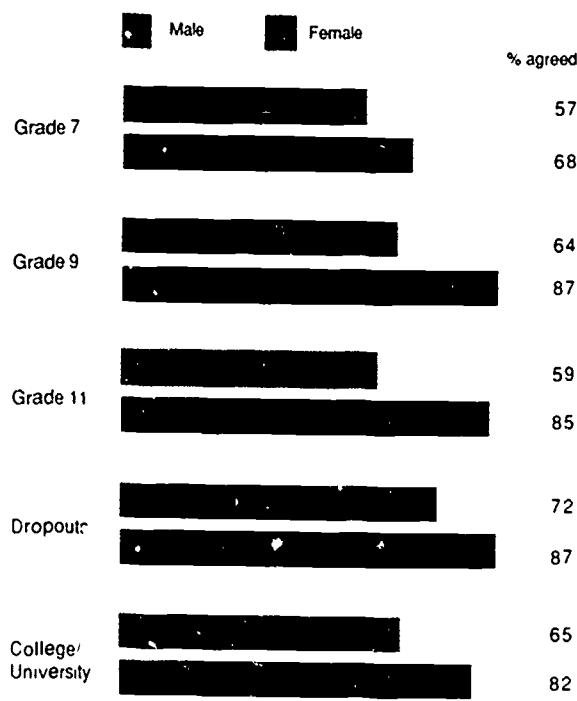
The teenager has doubts about self-image, is negativistic, has a labile emotionality, and is preoccupied with physical and emotional development. Because this period is marked by a rebellion against parental norms, adolescents gravitate toward peers and seek identification with them rather than adults.

B.E. Golinko, 1984, p. 749.

Contrary to what may have been expected, it appears that adolescents are likely to choose peer groups with values and expectations quite similar to parental values and expectations. Indeed, when conflict occurs between adolescents and parents, it is usually related to the relatively insignificant matters already noted, such as choice of music or dress; furious disagreements regarding basic values are more the exception than the norm.

L. Guerney and J. Arthur, 1984, p. 96.

Figure 2.13
*My friends often ask me for help and advice,
 by gender*



Well over 80 percent of respondents, regardless of age, said they had a lot of friends. Except for those in Grade 7 and dropouts, high percentages of these young people reported that they had much in common with their peers. Few respondents reported being "too shy to make a lot of friends" or being "embarrassed when with someone of the opposite sex." Generally speaking, as young people get older, they are more likely to have talked about sex with their friends and to believe that people of the opposite sex like them.

Figure 2.14
*If I have a problem, I usually keep it to myself,
 by gender*

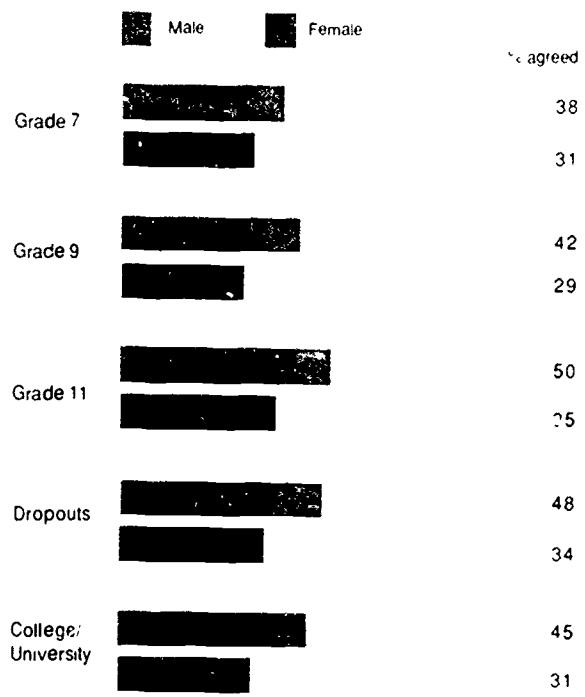
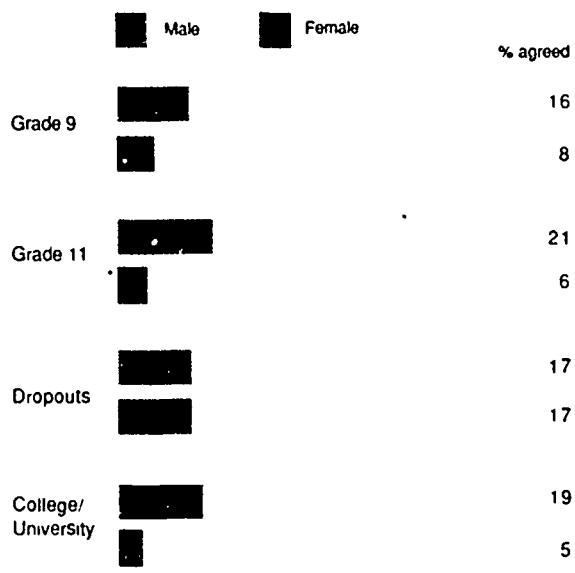


Figure 2.15
I feel pressure from my friends to be sexually active, by gender



Although 69 to 80 percent of the young people reported that what friends thought of them was very important, 17 percent or fewer felt pressure from their friends to drink alcohol, use marijuana, or be sexually active.

Young females experienced better relationships with, and less pressure from, their peers regardless of age. They were more likely than males "to be asked by friends for help and advice" (Figure 2.13) and less likely "to keep problems to themselves" (Figures 2.14). Fewer females, except for dropouts, said they were subject to peer pressure to be sexually active (Figure 2.15) and to drink alcohol (Figure 2.16).

Figure 2.16
I feel pressure from my friends to drink alcohol, by gender

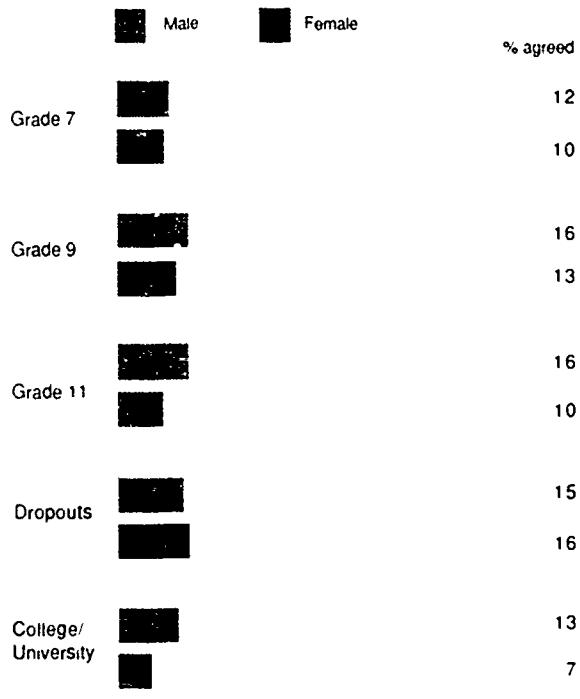


Figure 2.17
Alcohol consumption

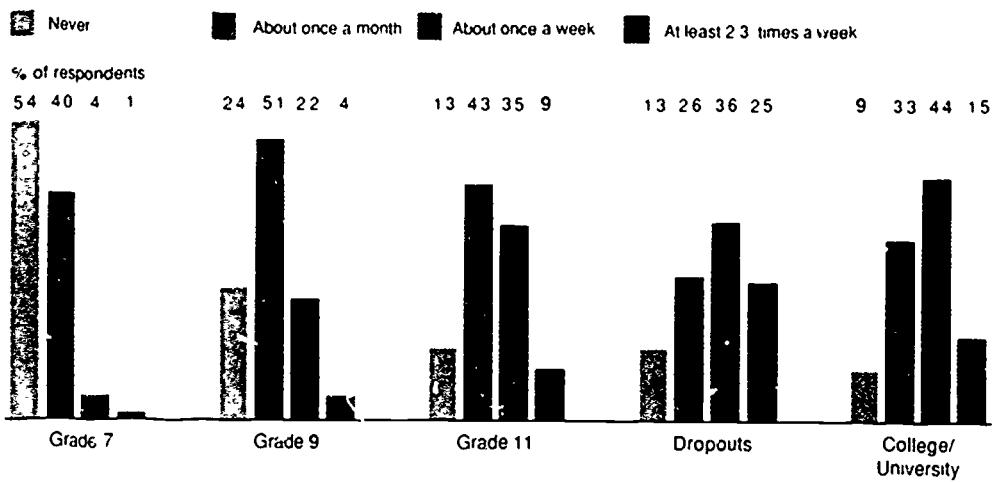
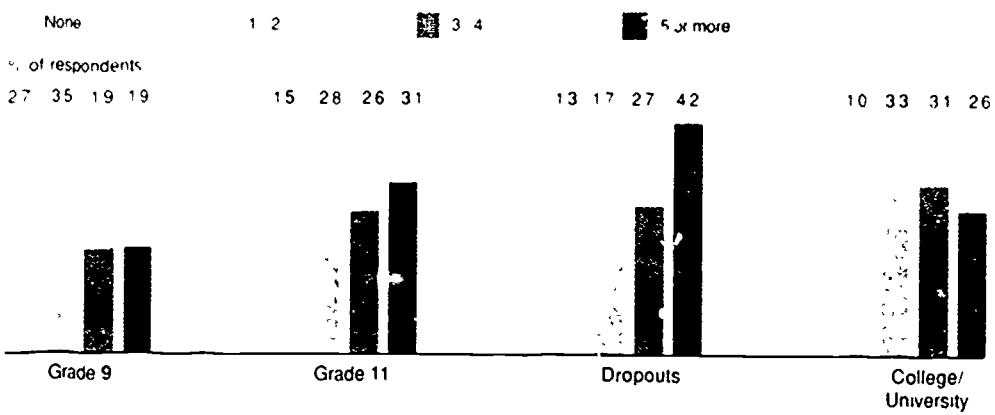


Figure 2.18
Usual number of alcoholic drinks at one time



E. Substance use

1. Alcohol

Forty-five percent of Grade 7 respondents had drunk alcohol (Figure 2.17). All but eleven percent of these youngsters drank alcohol about once a month or less; and much of their drinking is likely experimental or takes place on special family occasions. It is notable that 75 percent of Grade 7 participants in the 1985 *Canada Health Attitudes and Behaviours Survey* (CHAB) reported that they never drank compared with 54 percent of those in the same age group in this study. The percentage of CHAB respondents at the Grade 7 level who drank once a month was 15 percent; in this study it was 40 percent.

A greater percentage of older than younger adolescents surveyed drank alcohol once or more a week. Sixty-one percent of dropouts reported drinking once a week or more. Far fewer older respondents reported they never drank alcohol.

The pattern changed when we looked at the number of drinks they reported consuming at a time (Figure 2.18). Fifty-seven percent of those in both Grade 11 and college/university drank three or more drinks at a time. Youth who had ceased full-time attendance at school drank more often and more heavily than those in school.

2. Use of other substances

Eight percent of Grade 7 students in the study reported that they smoked cigarettes (Figure 2.19). The percentage of smokers in school increased with age. Sixty-seven percent of dropouts reported smoking. Of the in-school respondents, the greatest percentage of smokers smoked less than ten cigarettes a day. But among school dropouts, 55 percent smoked ten or more cigarettes a day.

The percentage of young people attending school full-time or college/university students who reported using cannabis products increased from three percent at Grade 7 to 25 percent at first-year college/university (Figure 2.20). Of the in-school respondents who used cannabis, the majority did so about once a month. Use at least once a week was highest among Grade 11 and college/university respondents (7%).

Figure 2.19
Cigarettes smoked per day

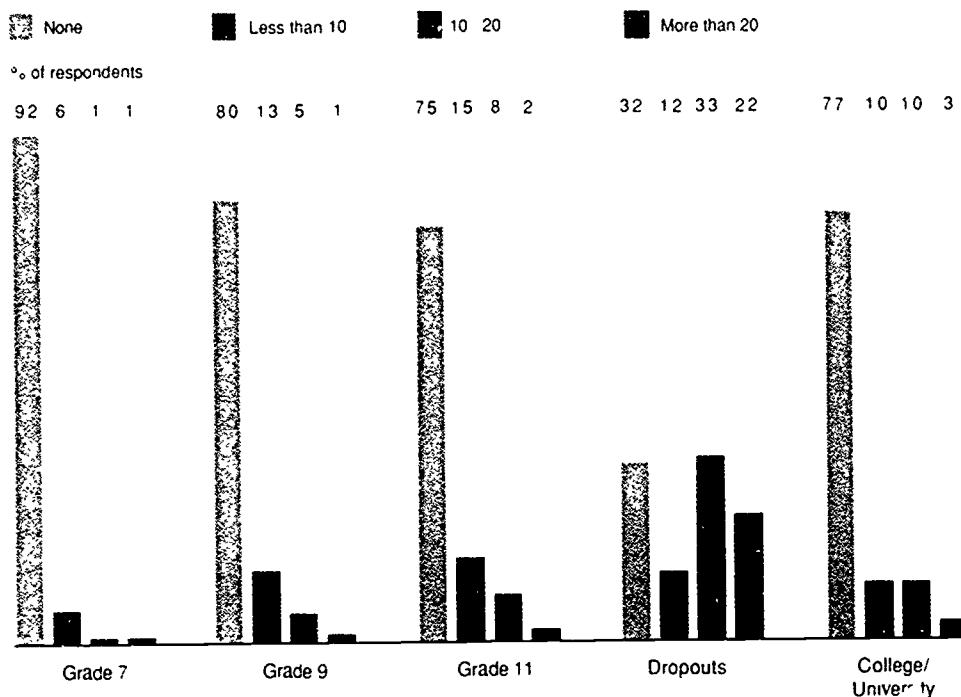
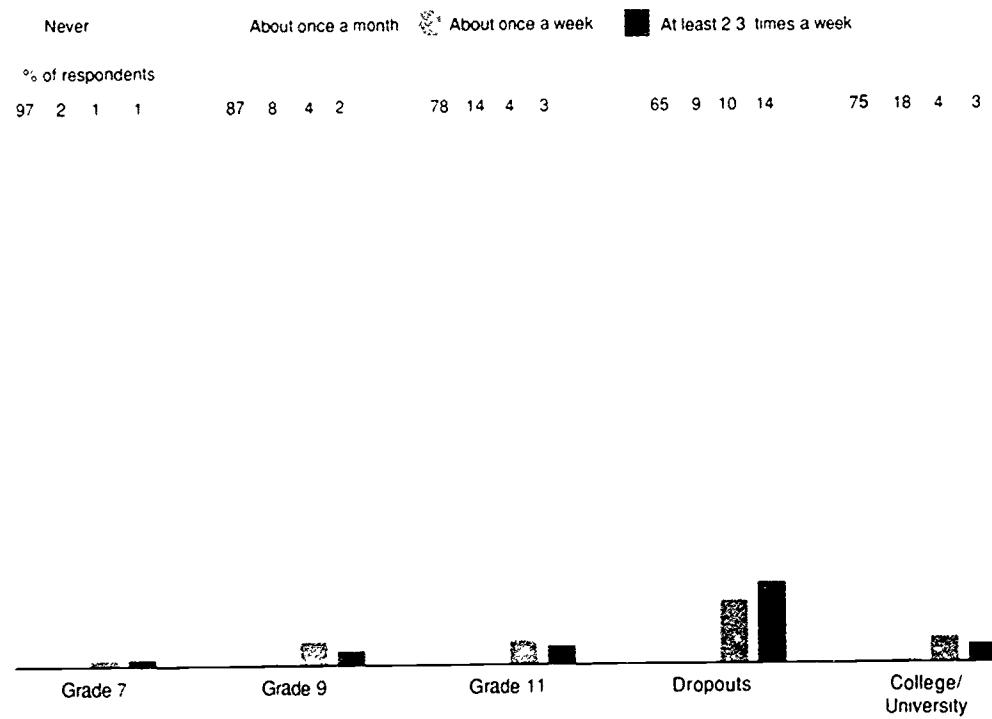
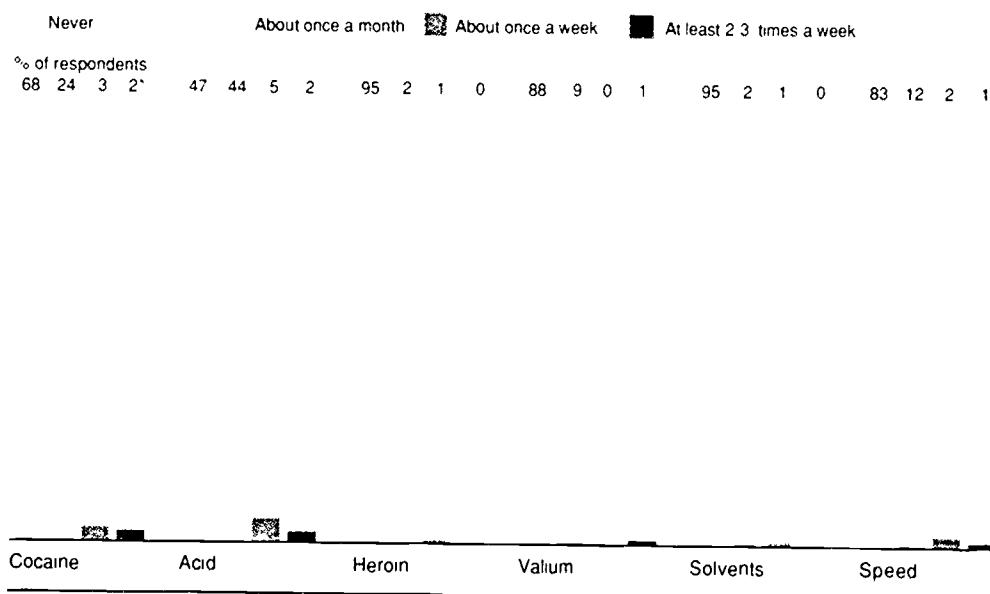


Figure 2.20
Use of cannabis



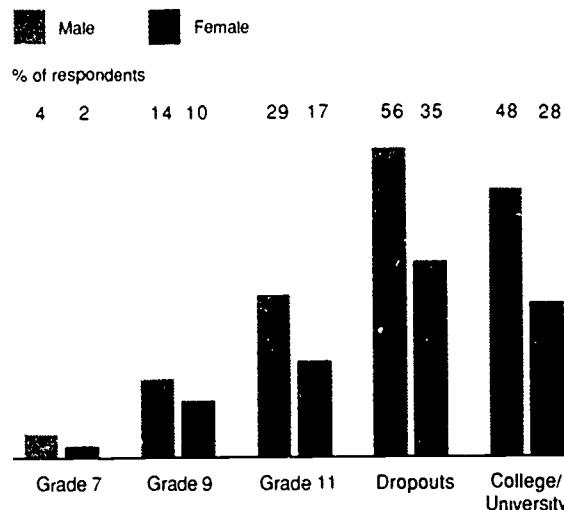
Dropouts, by contrast, were heavy users of cannabis products; 24 percent of them reported using such substances at least once a week. Few of them, however, used other drugs at least once a week (Figure 2.21). Nevertheless, half of them reported they used acid at least once a month while a smaller proportion of them reported using cocaine, valium and speed at least once a month.

Figure 2.21
Use of other drugs by dropouts



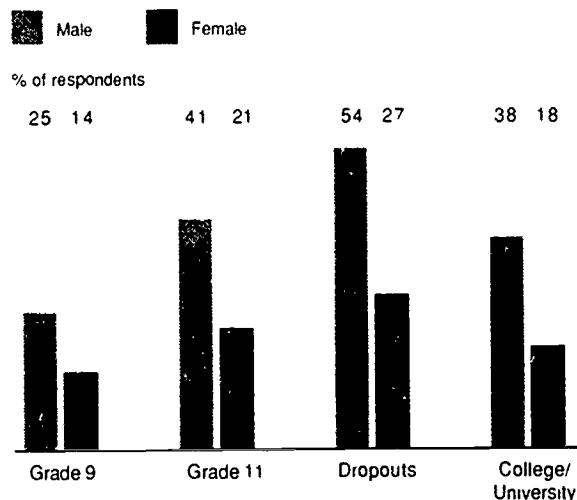
*Percentages do not add to 100 as a small percentage of respondents refused to reply to these items

Figure 2.22
Weekly use of alcohol, by gender



The percentage of the males and females in each age group who used drugs was generally similar: females were slightly more likely than males to smoke cigarettes, females and males were equally likely to use cannabis products, and males were slightly more likely to use all other drugs. A significantly higher percentage of the males who used drugs, in comparison to the females, were consistently more frequent and heavier users. Regarding the use of alcohol, for example, the percentage of males at all age levels who drank on a weekly basis was significantly higher than the percentage of female drinkers (Figure 2.22), and males drank much more alcohol at one time (Figure 2.23).

Figure 2.23
Five or more drinks at one time by gender



Adolescents and drug use

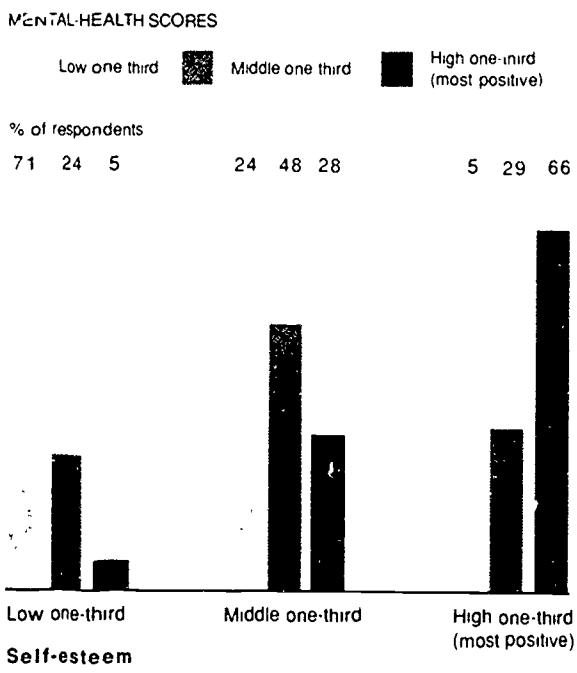
Adolescents are particularly vulnerable to drug use. Adolescence is a time of challenging personal and social problems during which the individual need not have pre-existing character disorders or live in an inadequate family to fall prey to drug abuse and its associated difficulties.

D. Huberty and J.D. Malmquist, 1978, p. 26

Adolescence is a time for experimentation and attaching great importance to one's peer group. In this period of personal turmoil and identity uncertainty ... it is not difficult to imagine youthful drug use as a means of enhancing personal experience while identifying with one's peer group. Hence, one study of drug users in [a school] found that the strongest indicator of use was found, not in social background characteristics or in feelings of alienation, but in subcultural factors within the [school] environment.

F.R. Scarpitti and S.K. Datesman, 1980, p. 20

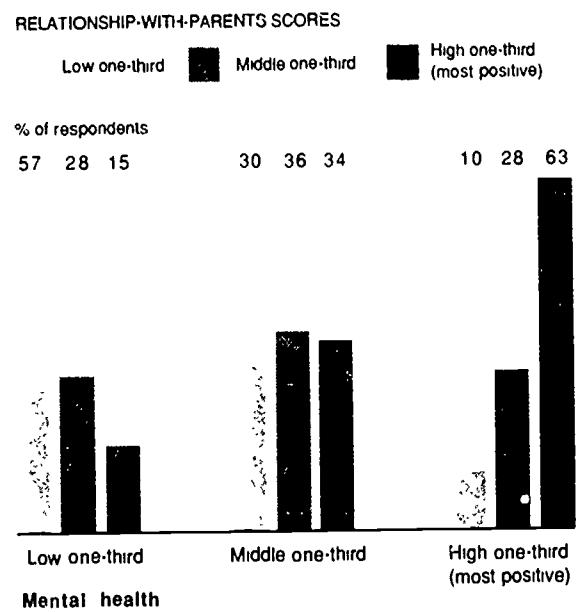
Figure 2.24
Relationship between self-esteem and mental health (Grade 11)



F. Interrelationships

Measures of mental health and self-esteem have much in common. In many ways mental health problems are a direct outgrowth of low self-esteem. We found a strong relationship between self-esteem and mental health for all age groups. In order to illustrate this relationship, we aggregated each participant's responses on all items to produce a score on each scale. We then divided the participants from each age group into three sub-groups (low one-third, middle one-third, and high one-third) based on their scores. This three-way division was used to compare the participants' scores on one scale with their scores on other scales. Figure 2.24 demonstrates that many of those with low self-esteem also had a low mental health score, and conversely, many of those with high self-esteem had a high mental health score.

Figure 2.25
Mental health compared with relationship with parents (Grade 7)

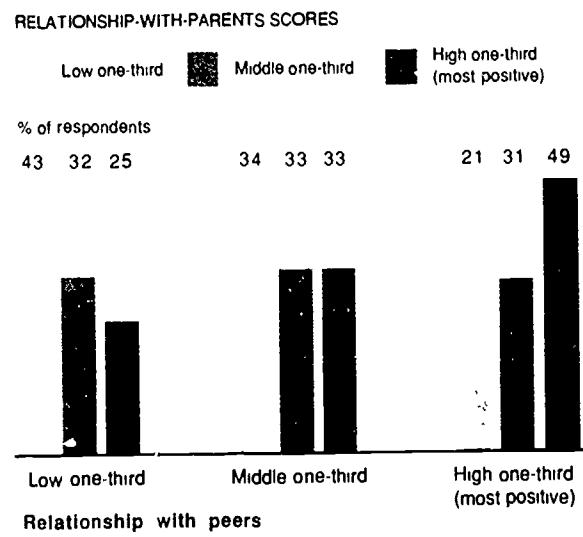


We found both self-esteem and mental health to be significantly associated with young people's relationships with their parents. That is, youth with more positive relationships with their parents were more likely to have higher self-esteem and better mental health (Figure 2.25). The same significant connection was found when we compared relationship with peers with self-esteem and mental health.

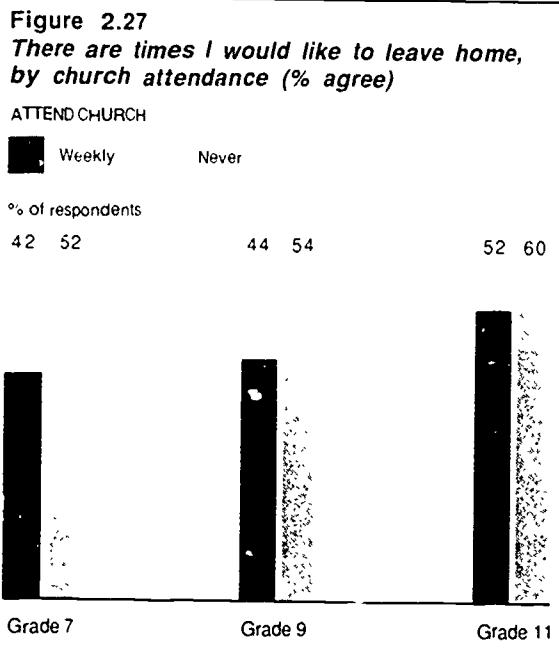
Interestingly, we found a significant correlation between relationship with peers and relationship with parents for all age groups. Figure 2.26 shows this relationship for Grade 7 respondents. Young people with the most positive relationship with parents tended to have a similarly positive one with peers. But there is at least one important area where values conflict – young people are more accepting of sexual activity than their parents, who frown on it or ignore it. This point is developed more fully in Chapter VI.

Regular attendance at church was negatively associated with the use of tobacco, cannabis and alcohol, and the amount of alcohol drunk at one time for all in-school age groups. For dropouts, use of alcohol was significantly associated with their going to church. Weekly church-goers were less likely to use drugs; and the few who did, did not use them to the extent that non-church-goers did.

Figure 2.26
Relationship with peers compared with relationship with parents (Grade 7)



There was little difference in self-confidence and self-esteem among young people in relation to regular church attendance, but youth who attended church weekly were more likely to agree with "I am often sorry for the things I do." Young people who attended church weekly were more likely to have a strong relationship with their parents and less likely to say, "There are times when I would like to leave home" (Figure 2.27). Frequency of church attendance is an important indicator of young people who are inclined to engage in potentially harmful drug-using activities.



G. Summary

In this chapter we introduced the characteristics of the young people surveyed. The data about respondents' background; degree of social adjustment; and the information about the proportions of males and females who smoke, drink and use other drugs will be related, in subsequent chapters, to survey findings regarding their knowledge and attitudes about AIDS and other STDs and to their reports of their sexual behaviour. The data analyses have revealed several important themes which will be developed further:

- 1) the links between different potentially harmful activities;
- 2) the possible vulnerability of young people with poor relationship with parents, low self-esteem and poor mental health;
- 3) the conflict between parental values and peer group values with regard to alcohol use and sexual behaviour; and
- 4) the variety of ways dropouts differ from adolescents in school, and how this affects their particular needs.

III Knowledge of AIDS and other STDs

A. Introduction

Some researchers contend that children should learn about health issues early because knowledge is the first step in developing the positive attitudes that lead to healthy behaviours. It follows that adolescents should know about a serious health concern like sexually transmitted diseases, including AIDS, as soon as practically possible, and they should continue to learn about them as they grow older and develop a greater understanding of their implications. Provincial/territorial governments have prepared curricula to teach adolescents about STDs in school, and most have recently made a commitment to add AIDS to the public school curriculum. Educational programs will be more effective if they are based on accurate, up-to-date information about what young Canadians now know about AIDS and other STDs. One of the objects of this study was to provide a reliable base of information about young people's knowledge of AIDS and other STDs for educators, community groups, parents, and the media.

The *Canada Youth and AIDS Study* complements other studies conducted to reveal young people's knowledge of health issues and related behaviours. The most recent such study is the *National Adolescent Student Health Survey* (NASH) in the United States. All these studies have shown that the proportion of young people who know about the danger of certain sexual practices is higher than the proportion of young people who regularly take precautions against the dangers. For example, 9 out of every 10 students agreed that people their age

Adolescent knowledge

To influence adults to alter existing lifestyle patterns and establish patterns which will prevent the development of chronic disease is difficult, whereas, to mould the developing attitudes and behaviour patterns of young people is a more realistic goal. The motivation behind the implementation of both the knowledge and the attitudes and behaviours surveys is based on this premise.

A.J.C. King et al., 1983, p. 1.

Some authorities believe that the nature of adolescence as a developmental stage creates the greatest risk for early sexual activity and consequently for sexually transmitted diseases. Young teenagers tend to be egocentric and unable to fully comprehend the consequence of their actions. As they move toward adulthood, they learn to anticipate the possible effects of their behavior. However, even older teenagers are likely to view sexual experimentation as exciting and challenging.

T.J. Hernandez, 1987, p. 127.

Researchers agree

This study of adolescents in Massachusetts indicates that many adolescents are still misinformed or confused about AIDS. The majority know that AIDS is related to blood, other body fluids, and sexual and drug behaviours, but many have limited understanding of the mode of transmission. The confusion and misconceptions about the disease may mean that even among the highest risk groups a substantial minority do not even know what sexual and drug precautions are necessary to avoid transmission of the virus. Only 15% of sexually active adolescents reported changing their sexual practices to avoid contracting AIDS, and only 20% of those who changed mentioned truly effective precautions.

L. Strunin and R. Hingson, 1987, p. 825.

Regarding AIDS, 93 percent of those surveyed knew that the disease is transmitted by sexual intercourse and 91 percent knew it was transmitted by drug needles. They also reported knowing that condoms are an effective way to avoid AIDS, and believed they should be used. However, there are several significant misconceptions about the disease within this group: many mistakenly believe that blood transfusions are a common way to get AIDS; almost half believe that there is an increased risk of AIDS when donating blood; and more than half believe that washing after sex reduces the chance of being infected with the AIDS virus. ... Regarding sexually transmitted diseases (STD), many adolescents do not know how to avoid getting STD, nor can they identify common early signs of STD. In addition, more than one-third (38%) of adolescents would not know where to go for medical care should they contract an STD.

National Adolescent Student Health Survey 1988, p. 2.

should use condoms if they have sexual intercourse (NASH, 1988), but in another study 27 percent said they never use them and only one-third used them consistently (Wattleton, 1981).

There are specific facts young people must know about how AIDS is transmitted and how to avoid contracting the HIV, and the most important of these were covered in the survey. We presented respondents, depending on their age, with between 20 and 28 statements about AIDS and other STDs. They included statements representing much of what is known about AIDS today, about the treatment/cure for AIDS, the signs of the infection, and how the HIV attacks the body. We assumed that based on their responses we could, therefore, make conclusions about their general knowledge about the disease. How they apply this knowledge is examined in the chapters that follow.

Young people talk about AIDS

AIDS is the most deadly of all sexually transmitted diseases. It's very easy to catch. There is no cure.

Female, Grade 9.

AIDS is an immune deficiency. It affects your immune system, but AIDS isn't what you die from. It is any disease that develops that kills you. People with AIDS get rare diseases. Their immune systems can't fight it off and eventually you die. There is no cure for AIDS.

Female, Grade 9.

AIDS is a disease that affects your immune system. So your body doesn't fight anything, even as small as a common cold. It comes from homosexuals, but you don't have to be gay to get it. It is fatal.

Female, Grade 11.

It is a deficiency that attacks a person's immune system.

Male, College.

B. Specific knowledge of AIDS and other STDs

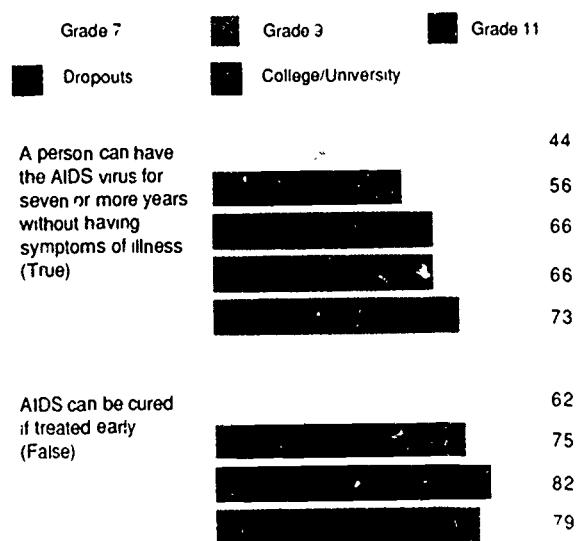
Because of the different levels of sophistication required to understand some concepts, respondents in the different age groups were not presented with identical items; therefore, we cannot compare responses to all items designed to indicate knowledge about AIDS and other STDs across all age groups. We can show how levels of knowledge of some relevant concepts vary with age, and we can compare the responses to specific items of some of the groups surveyed. Only selected items are presented in the figures which follow.

I. AIDS

a. Definition

Eight questionnaire items, ranging from those about blood tests, cure, and lack of symptoms, to the way the virus works in the body, were used to indicate how accurately respondents define AIDS. In two of the items addressed to at least four of the five groups, the higher the age of the group surveyed the higher the percentage of correct responses (Figure 3.1). Dropouts were the exception on most of the eight items, in that they tended to be slightly less knowledgeable than Grade 11 students even though most were older.

Figure 3.1
Knowledge of AIDS - definition
(% correct)



How AIDS is transmitted

A disease that is transmitted by sexual intercourse, that is all I know.

Female, Grade 7.

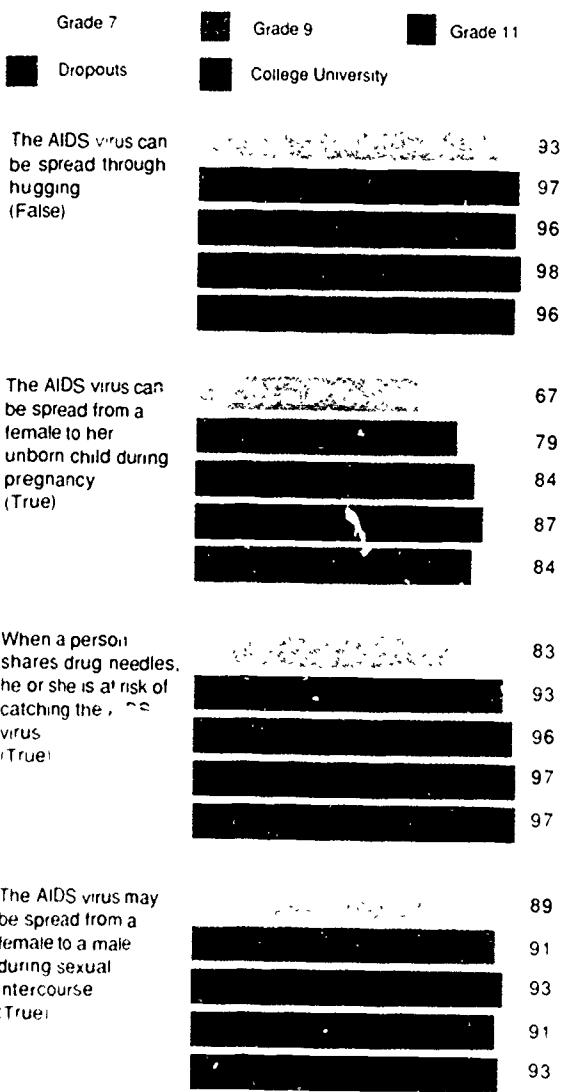
AIDS is a disease that is transferred from one person to another by sexual intercourse. This is especially true if you have sex with more than one partner.

Male, Grade 9.

AIDS is a disease that attacks the immune system of the body. You can only get AIDS from sex or sharing blood needles. In previous years you could get it from blood transfusions, but now the blood is screened before a transfusion. AIDS is a brutal, horrid and repulsive disease!

Male, Grade 11.

Figure 3.2
Knowledge of AIDS - transmission
(% correct)

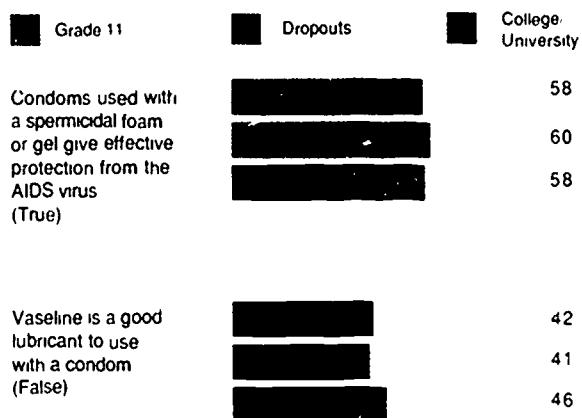


b. Transmission and protection

Ten statements in the survey covered the possible ways AIDS is or is thought to be transmitted (hugging, pregnancy, sharing needles, sexual intercourse), and who is at risk. High percentages (67 to 93%) of Grade 7 respondents responded correctly to each of six of the items presented to them. Responses to four of the items can be seen in Figure 3.2. The lowest percentage was 67 percent of the Grade 7s who knew that an unborn child can contract the AIDS virus. Results from Grade 9 respondents were even better (79 to 97% correct responses to seven items).

Grade 11, dropout, and college/university respondents were very knowledgeable about how the HIV is transmitted, but had inadequate information about protection. As is illustrated in Figure 3.3, only 41 to 60 percent of these respondents had correct answers to the two questionnaire items about effective use of condoms.

Figure 3.3
Knowledge of AIDS - protection
(% correct)



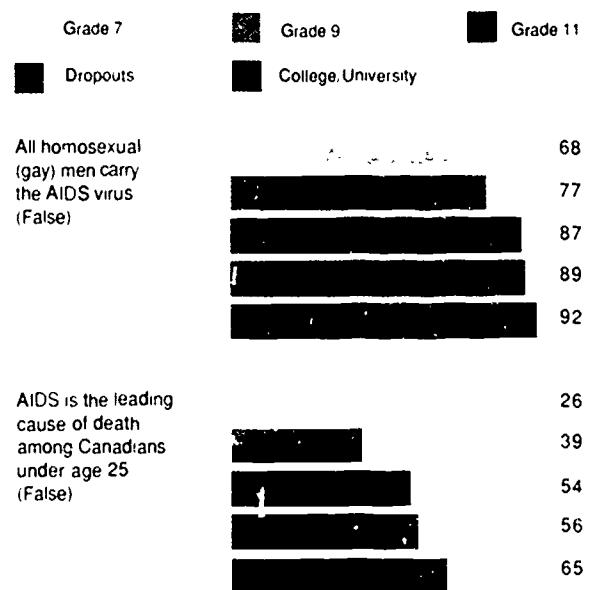
c. Myths

Misinformation about AIDS is widespread among Canadians and likely causes irrational fears about the disease and intolerance toward persons with AIDS, intravenous drug users, and homosexuals. To obtain a picture of the myths Canadian youth believe about AIDS, we asked all five groups to agree or disagree with two statements. As Figure 3.4 shows, misinformation was most prevalent among younger respondents; it diminished progressively as age increased. Many of the 12 to 15 year olds were misinformed about the proportion of gay men carrying the AIDS virus and most thought AIDS was a leading cause of death among Canadians under 25. Furthermore, 51 percent of Grade 7 respondents and 40 percent of Grade 9 respondents thought that, in Canada, a person can catch the AIDS is by donating blood.

AIDS and misinformation

AIDS is a disease that some people get, not everyone, and there's nothing you can do to prevent getting it.
 Female, Grade 7.

Figure 3.4
Knowledge of AIDS - myths
(% correct)



Young People and STDs

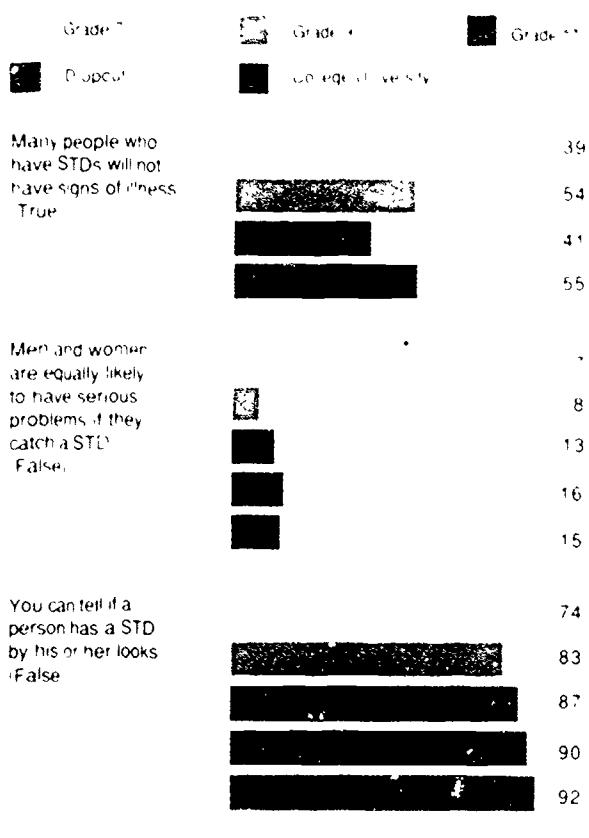
In 1986, according to Canada Diseases Weekly Report (December 26, 1987), the rate of gonorrhea for females 15 to 19 years jumped to almost twice that of boys in the same age group and approached that of males 20 to 24 years of age, historically the group with the highest reported gonorrhea. This was followed by females in the same age group.

The Medical Post, April 26, 1988

[Chlamydia] was the most commonly diagnosed infection, with a ratio of 1.8:1 as compared to gonococcal infection. Slightly more than half of the cases were male. The mean age for females was 22 (range 14-20) while for males it was 27.5 (range 15-63)

ICDC, Health and Welfare, Canada, 1988

Figure 3.5
Knowledge of STDs - definition
(% correct)



2. Other STDs

As described in Chapter I, the reported cases of chlamydia have been steadily increasing since 1983. Gonorrhea continues to be the most widespread STD, and reported statistics show that both gonorrhea and chlamydia are increasing a great deal among women 15 to 19 years of age.

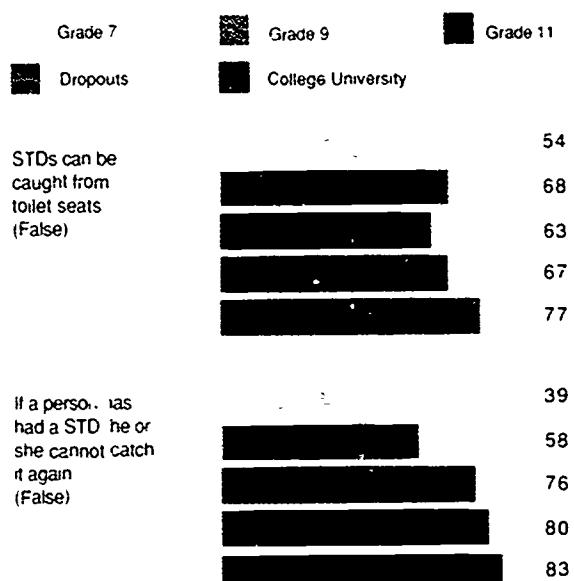
Respondents were not well informed on the vital facts about STDs. They were asked between five and 11 items about STDs, depending on the group, some on definition and others on transmission of and protection from STDs.

The percentage of youth who responded correctly to all statements about the definition of STDs increased with age, with one obvious exception (Figure 3.5). Fewer Grade 11s than Grade 9s knew of the symptom-free stage associated with STDs.

Respondents lacked important knowledge about transmission of and protection from STDs. As can be seen in Figure 3.6, knowledge again tended to increase with age. However, a lower than expected proportion of most responding groups knew that STDs cannot be caught from toilet seats and that a person who has an STD can catch it again. Low percentages of Grade 11 (33%), dropout (53%), and college/university respondents (54%) knew that a person can get genital herpes from oral sex. Most older respondents (73% of Grade 11s and 88% of college/university students) knew that birth control pills do not protect females against STDs.

The average percentage of correct responses to the STD knowledge items generally increased with age: Grade 7s, 42 percent; Grade 9s, 52 percent; Grade 11s, 55 percent; and college/university students 63 percent. Dropouts had a better grasp of information about STDs: their average was a 70 percent correct response rate to these items.

Figure 3.6
Knowledge of STDs -
transmission and protection
(% correct)

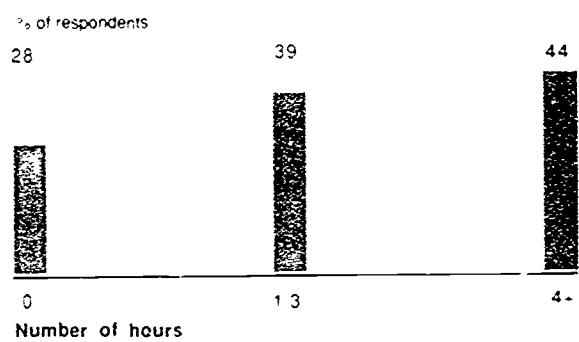


C. Factors influencing knowledge of AIDS and other STDs

We divided the in-school respondents' knowledge scores into three categories (high, middle and low), and examined a number of factors as they relate to them. Family socioeconomic status and educational background are linked to what students know, as they would be on almost any knowledge measure. As expected, academic average and aspirations after school graduation were important predictors of knowledge in Grades 7, 9 and 11. We also examined hours of instruction spent on AIDS education over the past two years in relation to respondents' knowledge scores. Figure 3.7 illustrates the results with the example of Grade 9 responses. The more time spent learning about AIDS in school (or in workshops and seminars in the case of older students), the more accurate the information.

One of the most interesting findings was the relationship between television and friends as major sources of information and level of knowledge. When students cited their major source of information as television or friends, their knowledge tended to be less accurate. When school or books and journals formed the main sources of information, their knowledge tended to be more accurate.

Figure 3.7
Highest scoring group on AIDS knowledge,
by hours of class time (Grade 9)



What is AIDS?

Some young people "don't really know"

AIDS is having cancer all over.

Male, Grade 7.

I am not really exactly sure what it is. But I know that you can die.

Female, Grade 9.

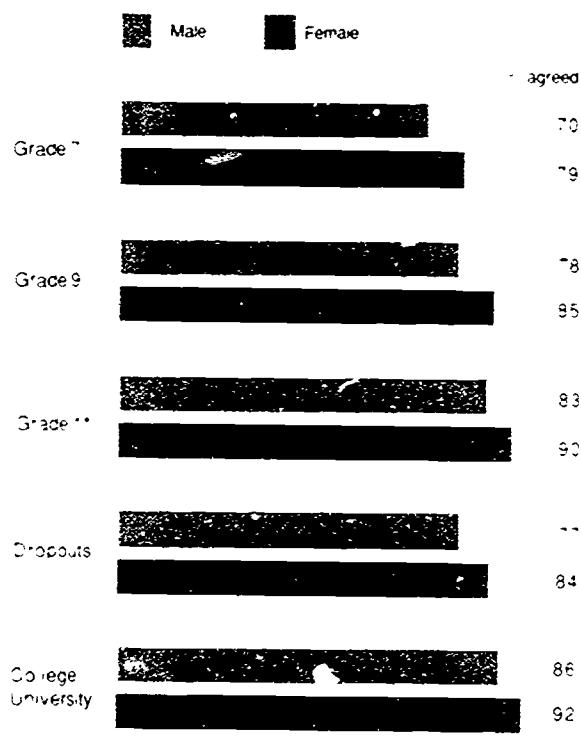
A disease from sex. ... I'm not sure what it really is, though.

Female, Grade 11.

AIDS is a social disease which people get from a lot of different ways. To give the truthful answer about what it is all about, I don't really know.

Female, University.

Figure 3.8
I need to know a lot more about AIDS, by gender



D. Overview of knowledge of AIDS

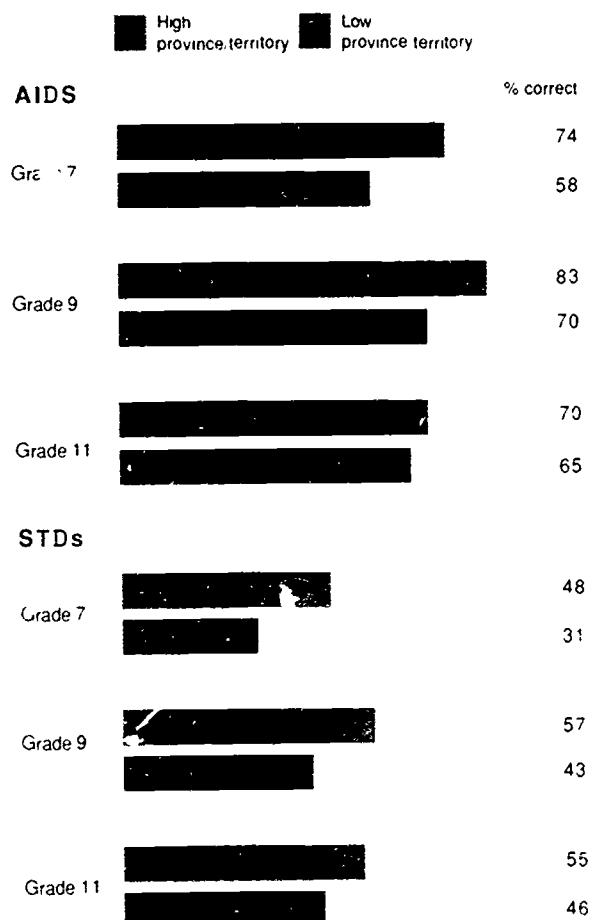
Canadian youth feel they need a lot more information about AIDS (Figure 3.8). Although a higher percentage of females desire more information, the differences in males' and females' knowledge of AIDS were not statistically significant. The average percentages of correct answers to the AIDS knowledge items by each responding group were as follows: Grade 7, 68 percent; Grade 9, 78 percent; Grade 11, 67 percent; dropouts, 77 percent; and college/university students, 72 percent.

E. Provincial/territorial differences

The differences between the provinces/territories with the highest and lowest average scores on knowledge of AIDS is greatest in Grade 7 (16%) and least in Grade 11 (5%) as Figure 3.9 indicates. Although the respondents' overall knowledge of STDs is less than their knowledge of AIDS, the provincial/territorial differences are similar.

As can be seen in the following chapter, there is a relationship between what young people know and where they acquire their knowledge. It is not surprising that in the provinces and territories where the topics of AIDS and STDs are required to be part of the school curriculum, knowledge scores are higher.

Figure 3.9
AIDS and STD knowledge: ranges of correct responses in provinces/territories



F. Summary

Generally, young people know more about AIDS than other STDs, but their knowledge was particularly deficient in the area of protection against AIDS.

Transmission of AIDS via sharing injection-drug needles and sexual intercourse was quite well recognized by all groups, but they were less aware that an HIV-infected mother can transmit the virus to her unborn child. Myths about AIDS were held by substantial proportions of the younger groups.

Few respondents had spent time learning about AIDS in class since many schools were in the process of implementing their AIDS curriculum, but there was a high relationship between the knowledge scores of those who had been exposed to AIDS curriculum and the time they had spent on the topic.

Low proportions of respondents knew of the symptom-free and repetitive characteristics of STDs and how one catches genital herpes.

Television, a primary source of information about AIDS, does not contribute to the accuracy of most young people's knowledge. Many indicated that they need to increase their knowledge about AIDS.

IV Sources of Information

A. Introduction

In Canada, the media and the government have been our main sources of information about AIDS. The media have helped, by their continuing coverage and use of clear language, to inform Canadians about the disease, but, by tending to sensationalize issues, they have confused some individuals' understanding of how AIDS affects them. Since the public first learned about AIDS, vague, contradictory messages about its symptoms, transmission and prevention have been common in both media and government information. Government officials, themselves unsure of the exact nature of the epidemic and worried about the response of constituents, have been slow to take responsible action. We made it an objective of the study to find out where young people get most of their information about the disease and how they interpret the messages of media reports and government action.

1. Media

In the early 1980s, the media were the primary sources of information about AIDS in North America. When news about AIDS was first released, the media discussed it cautiously, describing the types of sexual behaviour through which HIV infection is primarily contracted in socially acceptable and, therefore, vague terms. This initial, cautious approach was soon abandoned and now journalists speak and write explicitly about AIDS and describe in easily understood terms the sexual activities through which HIV is transmitted. This less discreet approach is especially apparent in media advertising. Advertisements for condoms have become

Critics on the role of the media

Sensationalism

Analysis of news coverage of AIDS shows that mass media often respond to sensationalism rather than to important scientific developments. In addition, scientific disagreements are better adjudicated by evidence than by appeals to authority. As a result, media coverage often obscures the process of scientific deliberation.

W.A. Check, 1987, p. 987.

Popularization

The need to make major news topics interesting to the large majority of readers and viewers is a second feature of mass media journalism that has impaired rapid and frank communication concerning AIDS. ... several facets of the political reporting model [have been] derived from reliance on appeal to authority and [have] led to unbalanced reporting on AIDS: single-source reporting, favoring quotable sources; crediting conspiracies; lack of follow-up; focussing on controversy; and emphasizing entertainment value.

W.A. Check, 1987, p. 987.

Confusing information on AIDS infection

Because only a small minority of people carrying the virus develop the disease themselves, it's estimated there are as many as ten million people now infected.

The Ottawa Citizen, November 22, 1986.

In 1986, the U.S. National Academy of Science estimated that between 25 to 50 percent of those infected with the virus will develop AIDS eventually. The Centers for Disease Control in Atlanta estimate that between 10 to 30 percent of those infected will go on to the final stages of AIDS within the next five to ten years. Several studies of groups of HIV infected men have shown that 35% develop AIDS by seven years, the longest any group has been studied

J.D. Greig, 1987, p. 23.

commonplace, for example. Abroad, advertisements in newspapers, on television, in buses and on billboards are startlingly explicit. The change has helped: the public seem to be now more aware of the sexual activities most likely to spread the virus.

The media have acted positively by keeping the issue of AIDS before the public and giving it prominent coverage. Unfortunately information about AIDS tends to be presented in a sensational style and facts about treatment and incidence, for example, are misrepresented or

Pamphlet extracts



An estimated 50,000 Canadians harbor the AIDS virus, HIV, in their bodies, but the vast majority are still outwardly healthy. "The majority will get (AIDS)," said Dr. Harold Jaffe, an AIDS expert at the U.S. Centers for Disease Control in Atlanta. "Whether that will be 70, 50 or 100 percent we still don't know." The Star reported last month that an American Medical Association executive told an AIDS conference that everyone carrying the AIDS virus would eventually get fully developed AIDS.

The Toronto Star, June 15, 1988.

Journalism becomes explicit about AIDS

If AIDS is being spread in the school, it is because students are engaging in risky sexual behaviours such as unprotected anal intercourse or oral sex in which semen is ejaculated into the mouth. This is a very real possibility. It could be dealt with by frank discussion with students about safe sex practices and by making condoms freely available.

The Whig Standard (Kingston), 1988.

Students comment on the media

I think most of it is as bad as they're [the media] saying. When they say that it's just a game, they don't know they're just uninformed people, but the things about people dying, and all these people that are dying every year, I think that is kind of like true.

Female, secondaire III.

I've been seeing a lot of commercials on condoms now .. it's just really weird selling it on T.V.
Female, College.

Everything's changing all the time. I know some things about AIDS. It keeps changing - I'm getting so confused.
Female, Grade 11.

contradictory. The media generally have not assumed the task of responsibly informing the public about AIDS, and journalistic reports often confuse rather than inform.

2. Government

Governments around the world have been criticized for failing to implement AIDS research programs promptly, for not coordinating treatment procedures for AIDS victims more quickly and for hesitating before developing education programs. Many have been charged with prejudice against homosexuals.

Although young people are not as politically active as they were in the late sixties and early seventies, they are nonetheless aware of the impact governments may have on their lives. For example, their concern about nuclear war is well-documented and is often a topic of debates and letters to the editor and various politicians. Much of what young people see and hear relates directly to government reaction and action regarding AIDS, and we cannot underestimate their awareness and sensitivity to it.

Canada's federal and provincial governments formally recognized the implications of AIDS in 1985, but undertook few major educational initiatives. The federal government gave the Canadian Public Health Association (CPHA) a major responsibility for educating the public about AIDS and this organization developed a national AIDS education program within the politically volatile atmosphere created by the AIDS epidemic.

Government

Despite the wealth of information gathered about the human immunodeficiency virus (HIV), which causes AIDS, Krim anticipates that ten to twenty million people will become infected by 1991. "We had a chance to contain the virus, and we missed it," says Krim. Too many people refused to believe the disease could spread to mainstream society, the way it has in Africa, and so, she believes, the government took action too late. "Now the virus is out and will spread to the general population," Krim says.

Ladies Home Journal, October 1987, p. 186.

"AIDS is an issue the government is trying to steer as clear of as possible because it's not an issue they see as a vote getter," CAB president Michael McCabe said during a telephone interview from Ottawa.

The Globe and Mail, April 15, 1988.

A clear policy on AIDS and privacy should be a priority for the federal government, privacy commissioner John Grace says in his annual report. "While Health and Welfare Canada encourages employers to establish AIDS policies, the country's largest employer, the federal government, has as yet no such policy," Mr. Grace wrote in the report released yesterday. To hasten the development of federal guidelines, his office has been studying how various Government departments have been dealing with AIDS and privacy

The Globe and Mail, June 28, 1988.

Students comment on government

It's too diversified. You got too many different ideas. They should be organized or classified and they should have a committee or something that governs their ideas. You're left on your own with your parents and the TV and who's going to believe what the TV tells us?

Male, Grade 11.

They [government] say they don't have enough money to find a cure because they're spending a lot of money on nuclear bombs and stuff like that. Why shouldn't they spend all their money on things that will cure people and help people and not hurt them because they are always saying they're never going to use a nuclear bomb, but if they're not why are they building them? They should spend their money on something else like AIDS

Male, Grade 7.

Media headlines use scare tactics

Alarming AIDS in pregnant inner AIDS One case being every 14 minute Condoms fail to ensure protec U.S. age WASHINGTON, U.S. — Condoms show an "outlook grim" against AIDS as of any particular cond Food and Drug Admin the past, for the impossible to determine if as many condoms leaks water the who your ear pierced he dangerous

The difficulties governments face in disseminating information about AIDS are substantial. Different constituencies exert various pressures on and have different expectations of government. As well, there are great expenses associated with the development of large-scale interventions and the potential cost of treatment continues to escalate. As governments grapple with what to do, young people continue to take risks. Programs designed to reduce this risk-taking behaviour are needed as soon as possible.

When we began work on this study in late 1987, most provinces had designed and some schools had implemented an AIDS curriculum, particularly at the Grades 7 to 9 levels. The federal and provincial governments, as well as the CPHA and other health service organizations, had produced pamphlets, films, videotapes and handbooks. These sources present a consistent message about what AIDS is and how it is transmitted, but not about how to prevent contracting and transmitting HIV. Information about prevention varies according to its source. Church officials have used this epidemic to preach abstinence and monogamy; health officials recommend protection during "normal" sexual activity.

3. Information about AIDS

During the pre-pilot and pilot studies for the *Canada Youth and AIDS Study*, we discovered that young people wanted much more information about transmission of the AIDS virus and the incidence, effects and symptoms of the disease. Many indicated that they would prefer to get this information, not from television which was the primary source of AIDS information for most respondents, but from their schools, their parents and medical experts. The data from the study itself has considerably increased our knowledge about where youth are getting information about AIDS and about where they would prefer to get it.

On the questionnaires for the data collection we asked Grades 7, 9 and 11 and college/university respondents to select from a list of sources their two main sources of information about AIDS and other sexually transmitted diseases. For example, 18 were listed on the Grade 9, Grade 11 and college/university questionnaire, and 17 on the Grade 7 questionnaire. We excluded "personal experience" from the questions asked the youngest students. Dropouts were asked about their sources of information in an open-ended way and were not told the choices. To put their responses in a larger context we also asked all respondents to indicate their main sources of information about sex and birth control.

Young people ask about AIDS

Can AIDS be caught from mosquitos, animal bites, toilet seats, swimming pools, water fountains?

Female, Grade 7.

Does AIDS spread every time an infected person has sex with an uninfected person?

Male, Grade 9.

Where did AIDS come from and why is it spreading so rapidly?

Female, secondaire V.

Why were homosexuals the first ones to get AIDS?

Female, Grade 7

Frightening and confusing messages

Media reports are frightening. They make kids paranoid. I get so scared that after awhile I ignore information about AIDS.

Female, CEGEP.

We don't believe all we hear because the media uses AIDS to sell their programs and papers.

Male, Grade 11.

Messages about AIDS are confusing and contradictory, we're told one thing and then another, so we have grown to distrust them to some extent

Male, University

Respondents in Grades 9, 11 and college/university also selected, from the same list of sources, their two preferred sources of information about AIDS, other STDs, sex and birth control. Dropouts were simply asked to report the two sources from which they would prefer to obtain information about all these topics; their responses are considered separately.

Therefore, we have data for Grade 7, 9, 11, dropout and college/university respondents indicating first and second *main* sources of information about AIDS, other STDs, sex and birth control. We also have data indicating the *preferred* sources of information about these four topics for Grades 9 and 11 and college/university students. Dropouts were asked to give their preferred sources of information for all four topics combined. Figures 4.1 to 4.10 illustrate this data for each responding group.

Figure 4.1
Main sources of information about AIDS and other STDs (Grade 7)

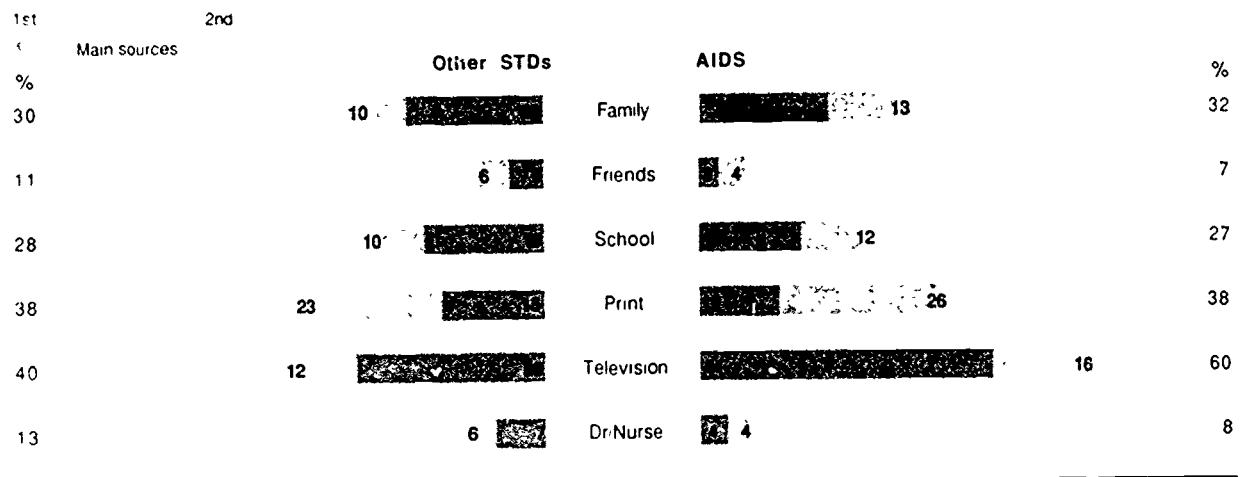


Figure 4.2
Main sources of information about sex and birth control (Grade 7)

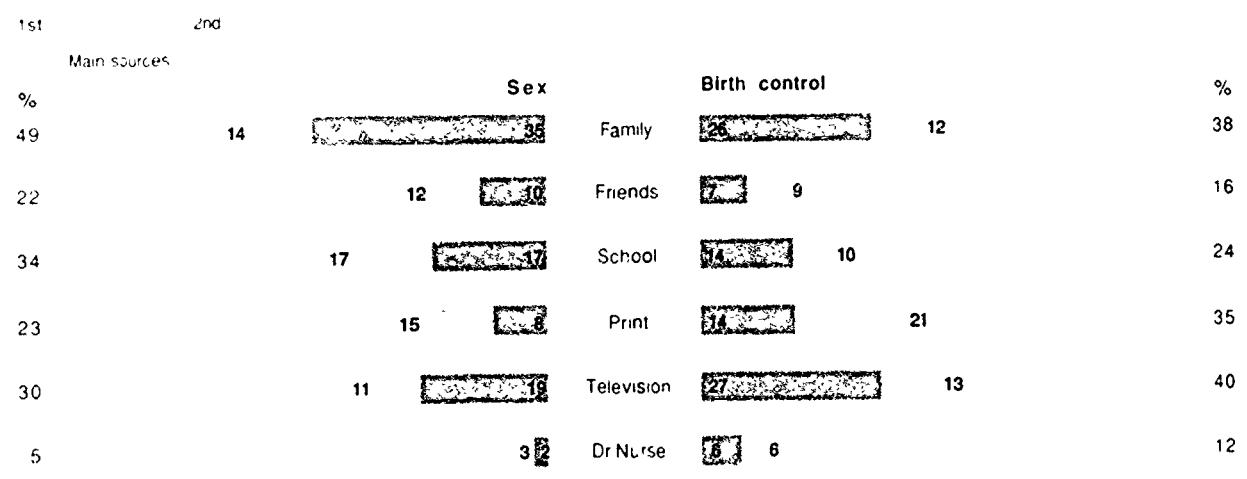


Figure 4.3
Main and preferred sources of information about AIDS and other STDs (Grade 9)

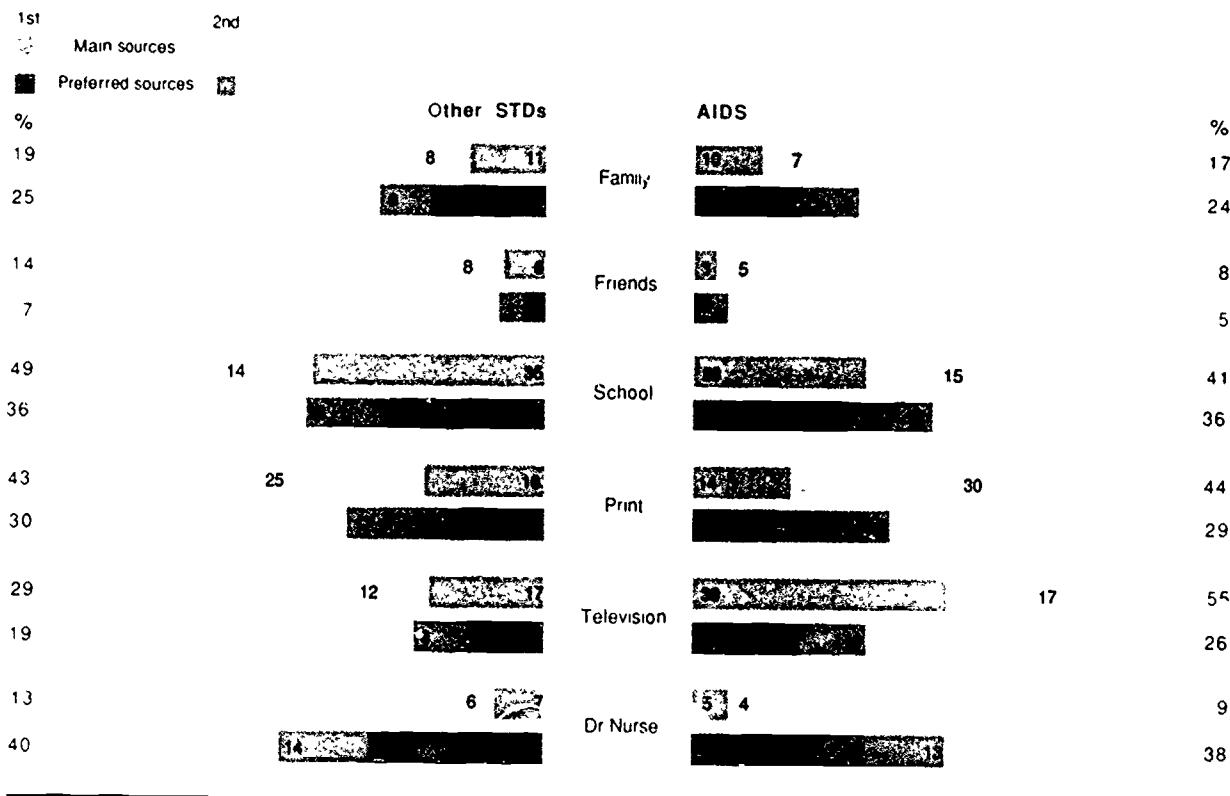
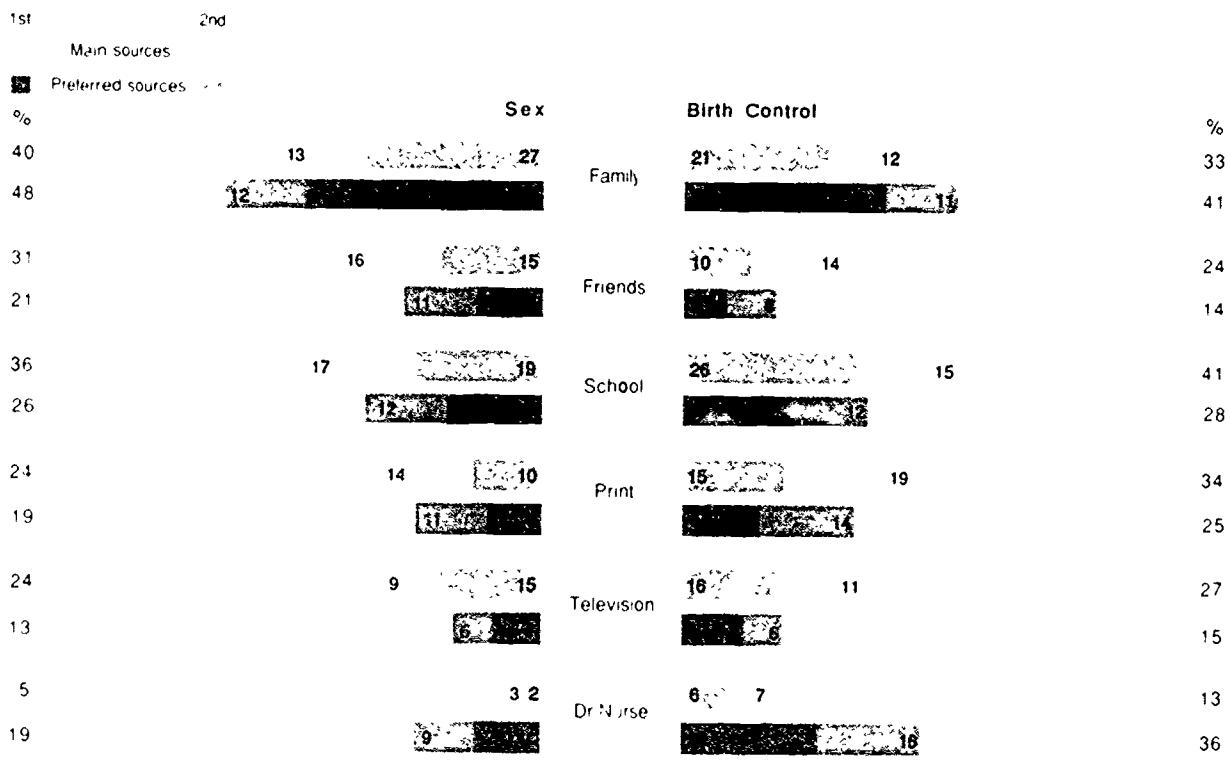


Figure 4.4
Main and preferred sources of information about sex and birth control (Grade 9)



B. Sources of information

1. Main sources

The very general pattern of responses indicates that young people learned about AIDS primarily from television, about STDs and birth control from school, and about sex from family members. Most respondents in all age groups surveyed cited television as their main source of information about AIDS. For other STDs and birth control, the main sources of information were given as school by Grades 9 and 11 and dropouts, print material by college/university students, and television by Grade 7. Only dropouts did not cite family members as their main informants about sex - their main source was school - although college/university students learned as much about sex from friends as from family.

2. Preferred sources

All but Grade 7 and dropout respondents indicated preferred sources of information about each of the four topics. Although television was the main source of information about AIDS for most of those surveyed, comparatively small percentages of respondents in each age group cited television as their first or second preferred source of facts about AIDS. Far larger percentages of those in Grades 9 and 11 preferred to consult a doctor/nurse for information about both AIDS and other STDs. College/university students like to get their information about AIDS from a combination of doctor/nurse, television and school and about STDs mostly from doctor/nurse and school. Similarly, the actual source of information about birth control cited

Television and AIDS

We get most of our information from television since parents and teachers are so uncomfortable with the topic. But, you can't count on kids watching AIDS programs on television and friends are not a reliable source of information.

Male, Grade 11.

by most respondents was not the one they preferred: more would have liked to learn about contraception from family members or doctor/nurse than from school or through reading. There was a better match between actual and preferred sources of information about sex: most did, and even more wished to, learn about it from family members. Interestingly, dropouts stated that their preferred sources of information for all four topics combined were school first and family a very close second. For them, medical sources were a distant third.

3. Television

The data indicate that television has been a very important source of information about AIDS for Canadian young people. It was the first main source of AIDS information mentioned by the largest percentage of respondents in each group surveyed. Television was not nearly as important a source of information about other STDS or about sex and birth control. Most respondents looked to a combination of other sources for this type of information. More significantly, however, comparatively small percentages of respondents named television as a preferred source of information about any of these topics.

We cannot tell from the data why television is not as popular a source of information as others. Compared to the more generally preferred sources, however, television is far less personal and it does not give young people an opportunity to question or to make information offered specific to them. And, about one-half of our respondents reported a lack of trust in the media's messages about AIDS.

Figure 4.5
Main and preferred sources of information about AIDS and other STDs (Grade 11)

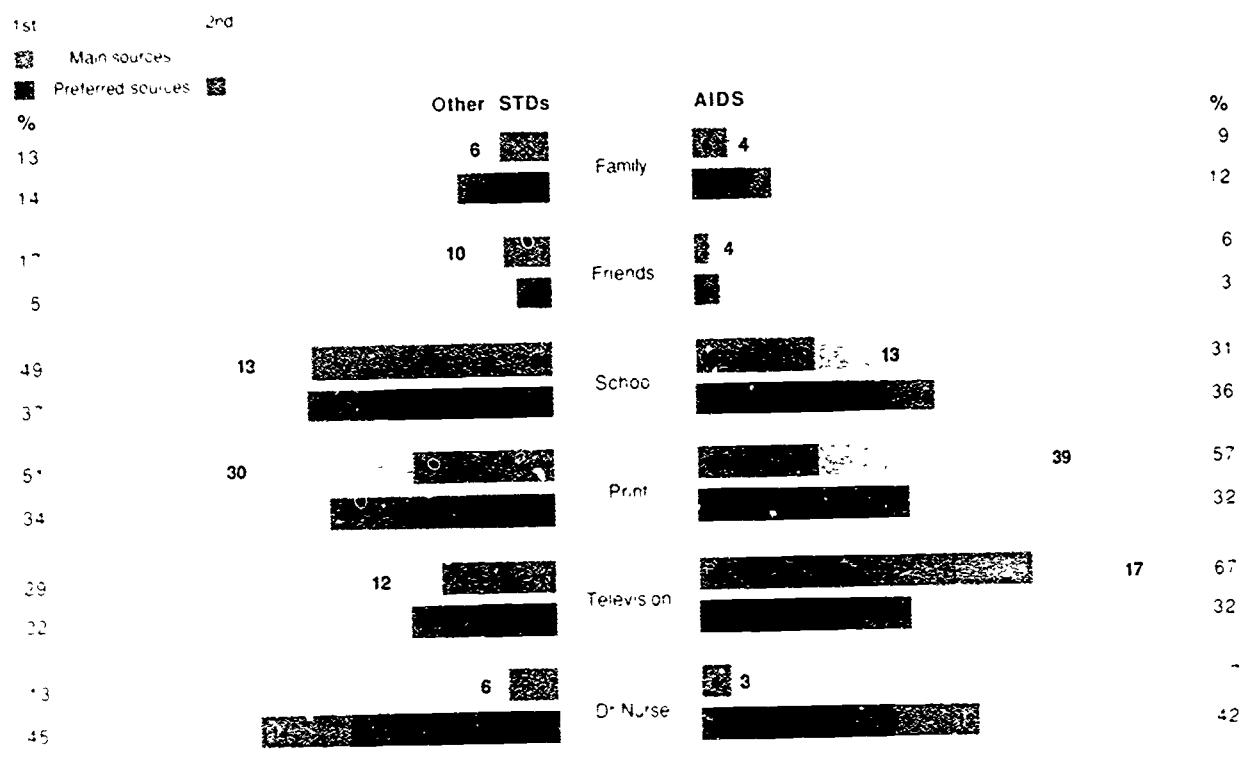


Figure 4.6
Main and preferred sources of information about sex and birth control (Grade 11)

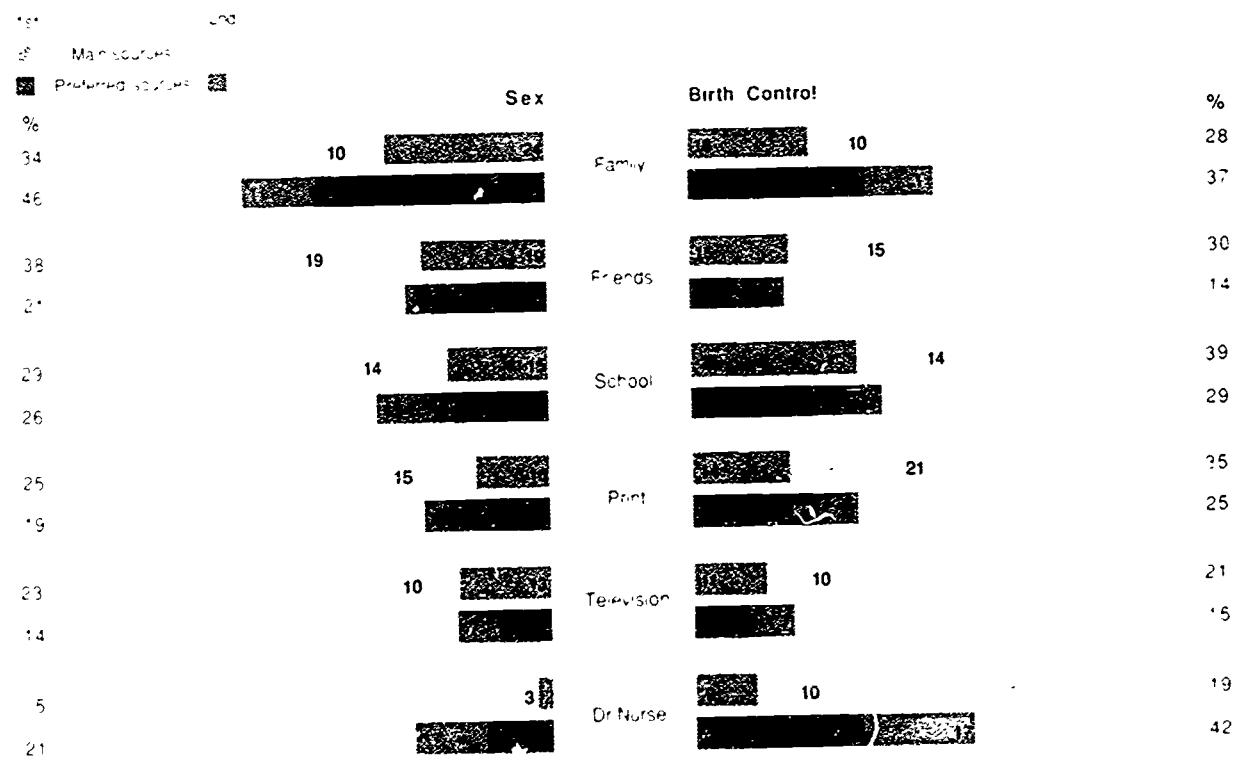


Figure 4.7

Main sources of information about AIDS and other STDs (dropouts)

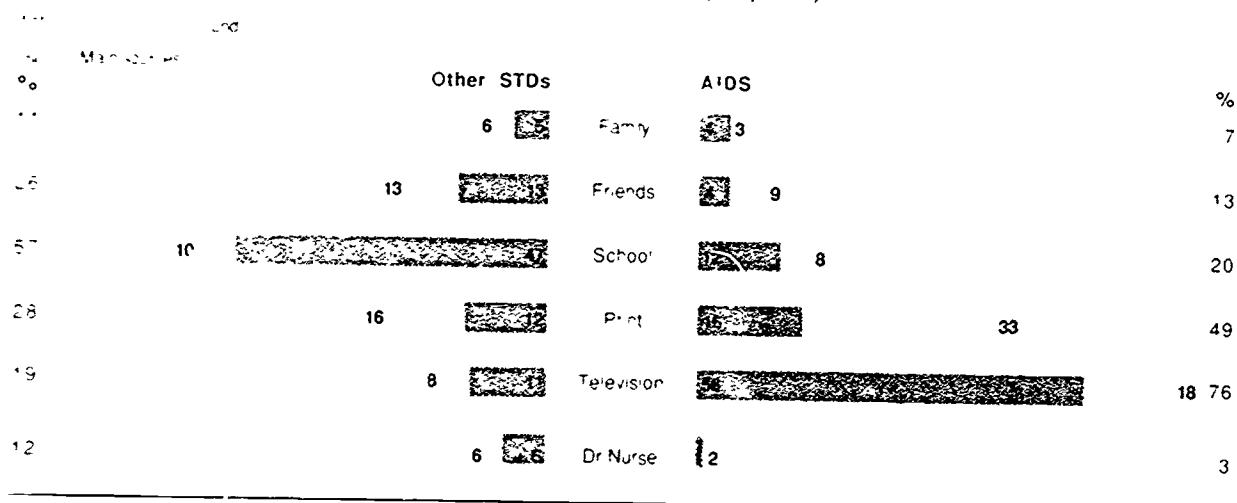
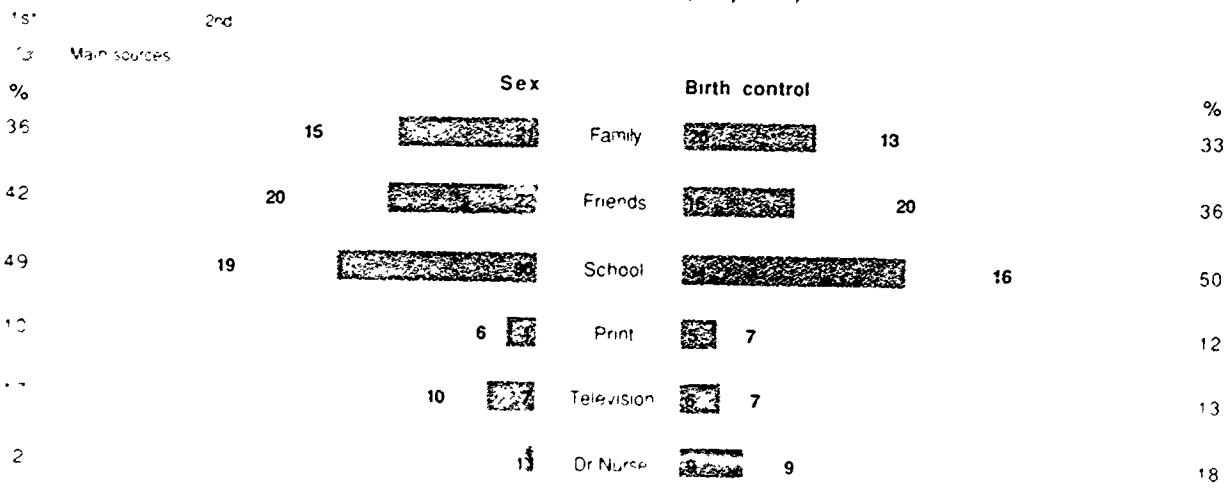


Figure 4.8

Main sources of information about sex and birth control (dropouts)

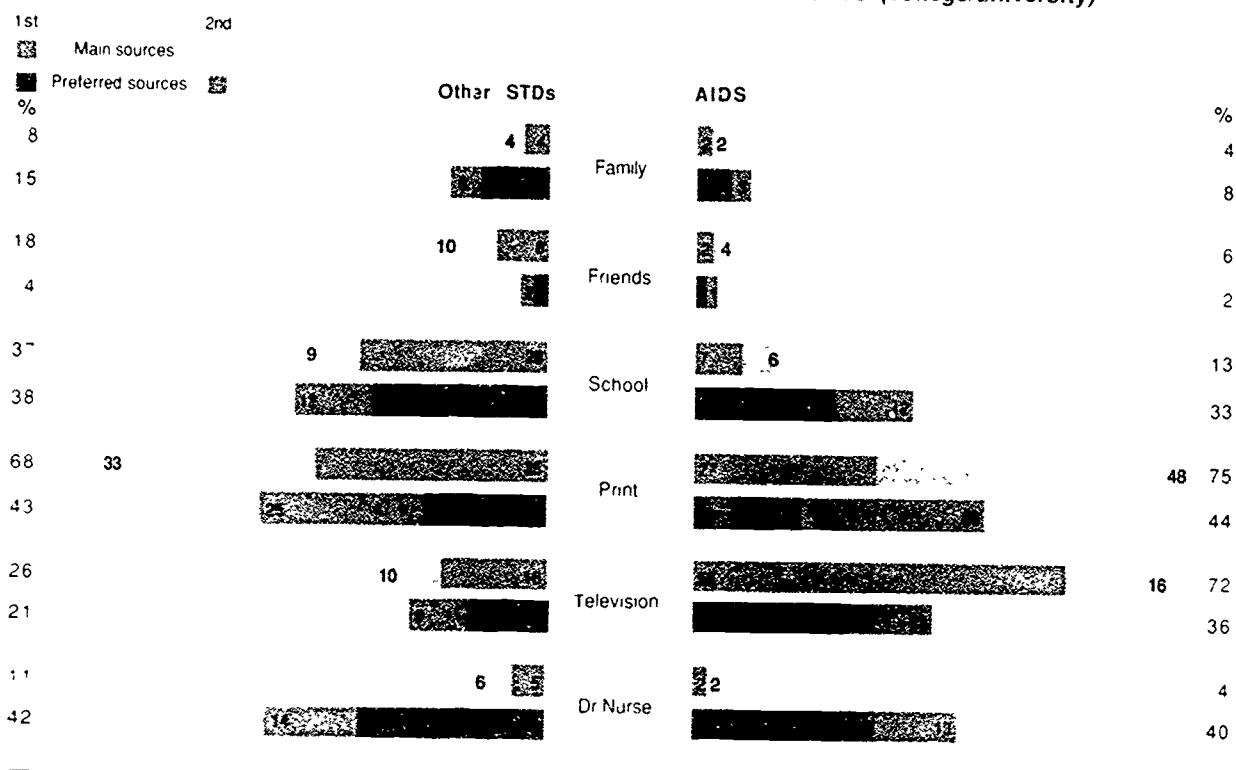
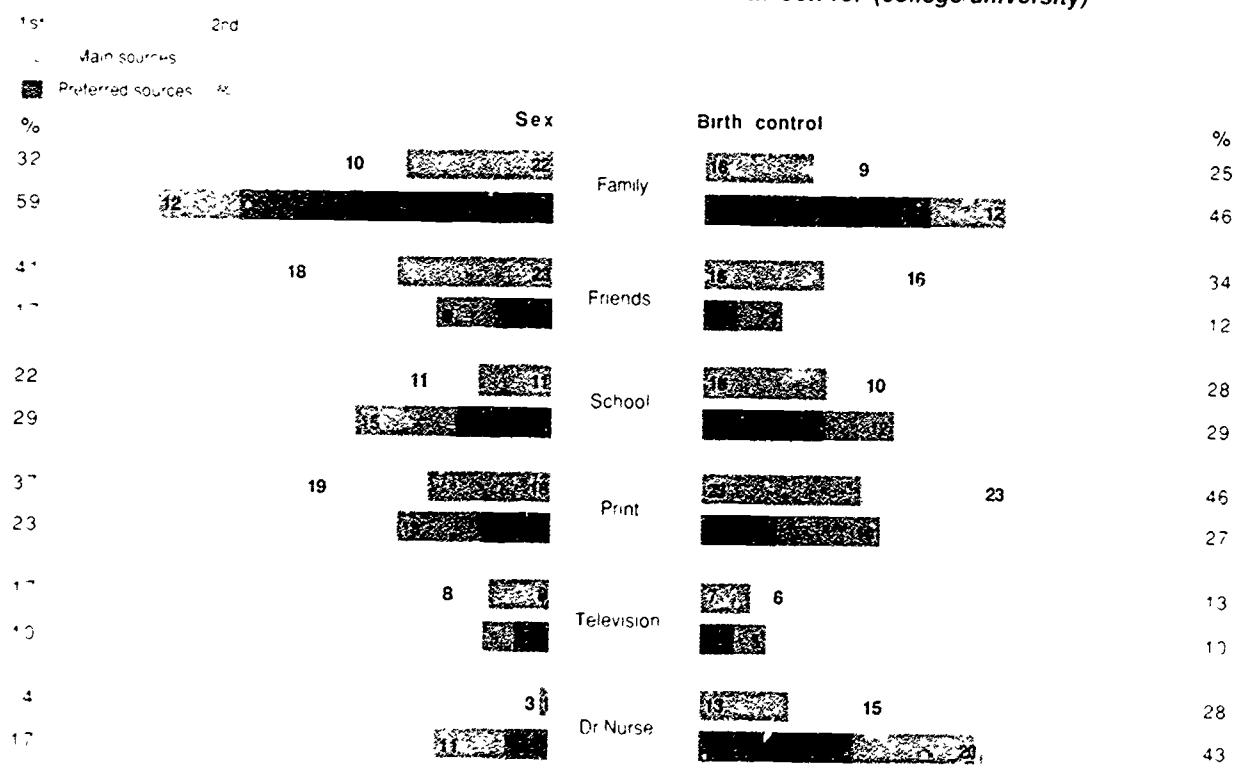


4. Print material

Many respondents indicated that magazines, newspapers, pamphlets, and books/journals gave them their information about AIDS and other STDs. Reliance on printed material about all the topics increased dramatically with age. For example, college/university students particularly favoured it as a source of AIDS information and placed it on a par with doctor/nurse. They also indicated a strong preference to read and consult medical sources to learn about other STDs. For younger respondents print material tended to be one of several main and preferred sources: Grade 7 students said they learned about STDs as much from printed sources as from television; Grade 9 learned more from school but cited printed material second; Grade 11 and college/university respondents mentioned school most often.

Older adolescents, especially females, are drawn to magazine and newspaper articles. Magazines featuring fashion advice, athletes, sporting events and rock/movie stars are especially popular. They often include articles on sex, AIDS, STDs and birth control, many written in a sensational and personal style.

Print material was not a main or a preferred source of information about sex by large proportions of respondents in any age group, with the exception that a substantial proportion of college and university students (two-fifths) did get information about sex from written sources. Print material was cited by just over one-third of the in-school respondents, even at the Grade 7 level, as a source of birth control information, and it was the main source of information about birth control for close to one-half of the college and university students. Thirteen percent of the dropouts indicated print materials as a source of birth control information. Less than one-third of respondents in each age group selected print material as the preferred source of information about contraception.

Figure 4.9*Main and preferred sources of information about AIDS and other STDs (college/university)***Figure 4.10***Main and preferred sources of information about sex and birth control (college/university)*

5. Family

As we have seen in Chapter II, a majority of young Canadians have a positive relationship with their parents. Most place considerable importance on what their parents think of them and try to please them. They tend, however, to keep their concerns about sexual matters to themselves, and many parents consciously ignore the subject. This does not mean that young people do not learn about sex at home. Family members were a main source of information about sex for a sizeable proportion in every age group (between 32 and 49%), and especially for respondents in Grades 7 and 9. However, many young people look to other sources for facts about birth control, AIDS and other STDs.

Family members tended to be less frequently cited by older respondents as main sources of information about all four topics; nevertheless, they were strongly preferred sources of information about sex and birth control, especially for those in college/university. From our focus-group interviews it was clear that youth did not believe their parents knew very much about AIDS; few of them had learned or preferred to learn about AIDS and other STDs from family members.

Of those who cited family as an actual source of information about sex, "mother" was the family member specifically mentioned by a substantial proportion of the younger students (40% of the Grade 7s and 32% of Grade 9s). "Mother" was the family member most often cited as a preferred source of information about sex by Grade 9s (39%), Grade 11s (36%) and college/university (47%) and by proportionally more females than males in every group who stated preferred sources. Fathers were preferred as a source by more males than females, but generally the percentages were less than for "mother".

Learning about AIDS at home

Parents are not knowledgeable about AIDS - we know as much as they do.

Male, Grade 11.

Parents don't know how sexually active we are and think we don't need information about AIDS.

Female, College.

I would rather learn about AIDS from my mom and dad if they knew enough about it.

Female, secondaire I.

Sexual attitudes and behaviours have changed so much parents can't understand our feelings and activities

Female, University.

They don't know much about it [AIDS] themselves. They always ask me, they said if they [the school] say anything come and tell us because we want to know, too. They just get it from the television.

Female, Grade 9.

They've talked to me about sex, a lot about sex. They tell me do's and don'ts and stuff like that . . . They don't believe you should have sex until after you're married.

Male, Grade 7.

Parents use it [AIDS] as an excuse so they don't have to handle it [sex].

Female, Grade 9.

6. School

AIDS has become part of the Canadian secondary school curriculum only recently and schools have been slow to add the topic to the course of study, partly because they are not certain about the context in which it should be taught. Health courses are either optional, or required in high school for one year only. School was cited as an important source of information about AIDS by many Grades 7, 9 and 11 respondents, but it was a less important source for college/university students. School was a very important source of information about other STDs for every age group surveyed, and Grade 9, 11, dropout and college/university respondents cited school more frequently as a main source of information about other STDs than about AIDS.

Learning about AIDS at school

The religious views of some adults are keeping AIDS education out of schools.

Male, Grade 11.

We've gotten nothing about AIDS from school, but we should get something.

Female, Grade 9.

Schools usually just give the bare facts, which are not enough. We need to know everything about AIDS.

Female, Grade 11.

Teachers don't know enough about AIDS - they are like the average person. Some of them should become informed and then teach us about it.

Male, College.

Sex education

Today sex education is an established part of the curriculum in most Canadian schools. If the 245 school boards surveyed in this report are representative of English Canada as a whole, it appears that at least 57 percent of the country's school districts offer sex education/family life programs.

J. Ajzenstat and I. Gentles, 1988, p. 7

Sex education courses have been offered for some time as part of physical education, health education and/or home economics/family life and, although school fell behind family members as a source of information about sex for respondents in all in-school age groups, it was the most often cited source of information about birth control by respondents in Grades 9 and 11. Over one-half of the dropouts learned about sex and birth control in school.

Just under 30 percent of respondents, and more males than females, preferred to learn about birth control at school; a slightly higher percentage preferred to get information about STDs primarily at school. Many more respondents selected parents and doctor/nurse as preferred sources of birth-control information, but school, doctor/nurse and print materials were the major preferred sources of information about AIDS and STDs.

7. Friends

Not many respondents cited friends as a main or preferred source of information about AIDS and other STDs, although friends were an increasingly important source of information about sex and birth control as the age of respondents increased. On the other hand, it seems many who have turned to friends for information about sex and birth control would rather have consulted family members. The percentages of respondents across

age groups who would prefer to learn about sex and birth control from friends were remarkably similar, and comparatively low.

We know that friends are exceptionally important to most young people, many of whom interpret social and political events using the values they share with their friends. The role of the peer group in giving and receiving information and reinforcing certain behaviours increases in importance through adolescence.

Females are particularly likely to ask their friends for advice and help. Some females give priority to relationships with friends rather than family members, and tend to consult friends before making major decisions. The influence of cliques among females increases in the later years of secondary school when many young people are becoming sexually active.

8. Doctor/nurse

Medical sources of information were not actually consulted by many respondents: they were main sources of birth control information for 18 percent of dropouts and 28 percent of college/university respondents. However, medical sources of information, specifically "doctor" and "nurse" combined, were cited as a preferred source of information about birth control, AIDS and other STDs by many in all the responding groups who were asked for preferred sources.

A greater proportion of females than males preferred to learn about AIDS from a medical source.

AIDS and the Roman Catholic Church

The separate school system faces an urgent and difficult challenge: how to reconcile the Roman Catholic Church's dogma on sex with the need to teach students how to avoid contracting and spreading the deadly AIDS virus. The Church considers the use of condoms sinful. Separate school teachers, therefore, cannot recommend their use, even though condoms are the only way of being at all sure that during sexual intercourse the AIDS virus will not be passed from one person to another. The best that separate school teachers can do is to counsel their students to refrain from sex before and outside marriage.

The Whig Standard (Kingston), April 15, 1987.

Canada's largest school board should ban information about condoms from Metro's 223 Catholic schools, a member says . . . In reaction to recent reports that public health boards are preparing to take the battle against AIDS into the classroom, trustee Reverend Carl Matthews said the teaching of the Roman Catholic Church will not permit information about condoms to be given to pupils.

The Toronto Star, January 1, 1987

Writing in the newspaper *The Times*, Cardinal Basil Hume said: "No campaign against AIDS can ignore or trivialize the moral question. Refusal to address the moral issues is itself a moral statement."

"In the public campaign so far, much attention has been focussed in very explicit terms on the way the virus is transmitted and on precautions to reduce the risk of infection. Too little has been said so far, and too vaguely, about the radical shift in attitudes needed to halt the advance of the epidemic..."

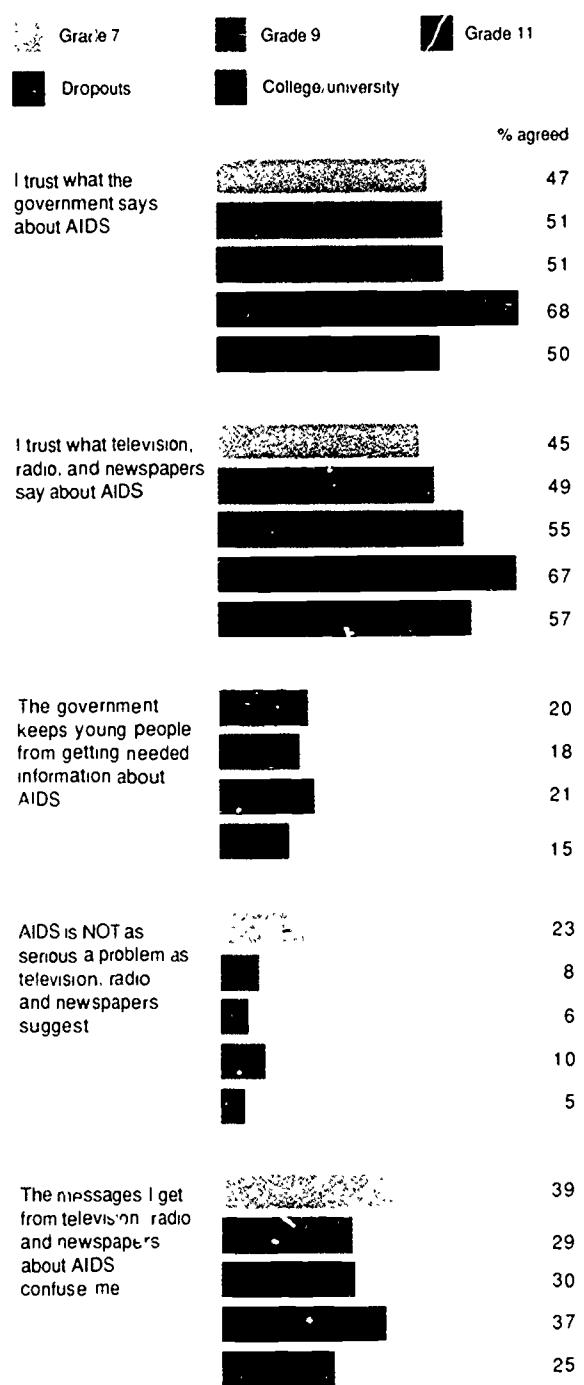
"The Roman Catholic Church therefore cannot be expected to lend support to any measures which tacitly accept, even if they do not encourage, sexual activity outside marriage."

The Toronto Star, January 18, 1987.

9. Church

One source of information which respondents had the opportunity to select on the questionnaire was "church (synagogue, etc.)," but few young people chose it either as a main or preferred source. For example .3 percent of the Grade 9s chose church as a main source of information about AIDS, and .5 percent chose it as a preferred source of information about the disease. Ironically, although it is not regarded as a source of information, some religions are taking a highly-publicized stand on preventing information from being disseminated. The Roman Catholic Church in particular has banned information about condoms in its health education classes, and limits its teaching to advocating abstinence.

Figure 4.11
Attitudes toward government and media
Information about AIDS



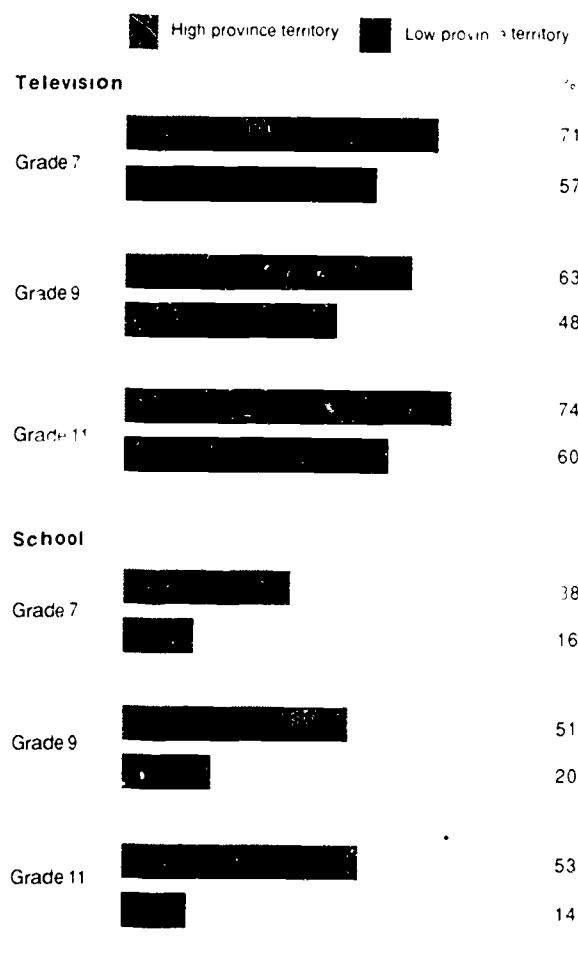
C. Attitudes toward media and government

We asked five questions to determine respondents' attitudes toward the media and the government as sources of information about AIDS. Figure 4.11 shows that between 45 and 67 percent of all respondents trusted media information about AIDS. Almost all of them accept that AIDS is as serious as various media sources suggest with the exception of fewer Grade 7s. A substantial number, however, are confused by conflicting messages and images. Almost half the student respondents trusted government information about AIDS and over two-thirds of the dropouts did so.

D. Provincial/territorial differences

There were substantial differences from province to province (including the territories) with regard to the role television and school play in providing information to young people about AIDS. The ranges of responses for Grades 7, 9 and 11 by province and territory are shown in Figure 4.12.

Figure 4.12
Television and school as main sources of information about AIDS: ranges of responses in provinces/territories



Typically, when a province/territory was in the higher range in terms of school playing a main role, the same province/territory would be at the lower range in terms of the role television played. For all three grades the difference between the province or territory with the highest responses indicating television as a main information source and that with the lowest was 14 or 15 percent. For Grade 9s the greatest difference regarding school as a main source was 31 percent; and for Grade 11s the greatest range for school was 39 percent.

With regard to sex, birth control and other STDs, there were significant provincial/territorial differences. The young people in those provinces or territories in which sexuality is given little attention in the schools tended to use less reliable sources of information to a greater extent than those where a well-developed program on sex education was in place. There was a 23 percent difference between the highest and lowest province/territory for Grade 9s on school as a source of information about sex. Adolescents in the lowest scoring province on school as a source of sex education tended to turn to friends more frequently for this type of information. There is some cause for concern in this finding. Those young people who need accurate information on these sex-related matters are not well served when their primary sources are friends and/or television. This has been confirmed in Chapter III where it was shown that those who learned about sexual matters in school tended to have more accurate information.

E. Summary

Although the media generally and government have been the main sources of information about AIDS in Canada, television and school have been the main sources for young people. Responses imply a dissatisfaction with what they have learned from television coverage of AIDS and of most other sexual matters; it did not rate as highly as a preferred source of information on these topics. Many regard government information as unreliable and inconsistent: they are disturbed by frequent changes in the definition of terms and by varying interpretations of rates of infection leading to death. Where provinces have implemented programs in schools, school is not only more often cited as a source of information about AIDS, but the students tend to have more accurate information.

It is interesting that, although family members are not a major source of information about AIDS for many, mothers are major imparters of knowledge about sexual matters and birth control; few fathers seem to have taken on this role.

Young people see doctors and nurses as the most effective transmitters of information about AIDS and other STDs. Sensational and extremist media reporting have left youth with too much uncertainty about how AIDS affects them and they seem to want more personalized information from experts.

V Attitudes toward AIDS and sexuality

Table 5.1
Adult Canadians' views about homosexuals

Attitude statements	% agreed
Homosexuals should be employed as:	
Members of Parliament	62
Junior school teachers	45
Doctors	52
Sales people	72
Prison officers	44
Members of armed forces	60
Homosexuals should be allowed to adopt children.	25

Source: Gallup Poll, April 6-9, 1988.

Young people are worried

You get scared sometimes ... sometimes you just want to ignore it and don't think about it because you don't want to get scared anymore than you are. You don't want to have to worry about your parents or anything like that.

Male, Grade 7.

I heard on the radio just a couple of days ago ... I'm not sure where it is, I think it's Canada and the United States together - ten million people have AIDS. I was curling my hair and dropped the curling iron.

Female, Grade 11.

I think you shouldn't go about not thinking about it because that's really wrong; if you don't think about it, it gets worse and worse. I think it will change the way I feel in the future, after all this bit about AIDS. I'm going to be a lot more worried about me having sex with somebody whether I know they have AIDS or not, because they might not know.

Male, Grade 7.

If you're sleeping with someone you're kind of sleeping with everyone they've slept with. It's scary.

Female, University.

A. Introduction

In this chapter we consider how information young people receive about AIDS influences their attitudes towards a variety of subjects including people with AIDS, homosexuals and homosexuality. We examine the extent to which they fear contracting AIDS and their views about sexual permissiveness, and attempt to determine how their future sexual behaviours may be affected by their attitudes.

AIDS has brought previously private issues into public debate (Table 5.1). For the first time many Canadians are openly and frankly discussing sexual behaviour, sexual permissiveness and homosexuality. The members of the United Church of Canada, for example, are currently engaged in heated, potentially divisive discussions over the place of homosexuals in the ministry of their church. Public schools that were once reluctant to implement explicit sexuality programs are now doing so. And, advertising and discussions about condom use have gained a measure of respectability; indeed, advertising condoms is viewed by many as a proper corporate response to a national health crisis.

Magazines that previously published articles promoting sexually permissive attitudes and behaviour now feature articles about unsafe sexual behaviour and unwise sexual attitudes. Also, they frequently survey their readers' beliefs and actions and publish the data in an effort to encourage "safer sex." These survey results, and findings reported by scientific and medical writers, suggest that more people are gradually rejecting both

Epidemics

Epidemic diseases have often scourged humanity, sometimes changing the fate of nations, the outcome of wars. Until recent times, their mysterious nature and unknown causes often led to irrational responses - sacrifice of virgins, burning of witches at the stake, persecution of Jews, faith in useless charms and nostrums, over-reaction to the fear of contagions.

J.M. Last, 1988, p. 9.

A different problem Canadians must face as a result of the AIDS epidemic is the phenomenon of scapegoating, in which people attribute blame or responsibility to something or someone other than themselves. In this epidemic, those who have been scapegoated up till now include homosexual men, people from countries where the disease is endemic, and injection drug users. There is no reason to believe that scapegoating will abate unless something is done to reduce it or change it. Scapegoating is a well understood social and cultural phenomenon. The danger is that it could become enshrined in law if Canadians attempt to deal with the epidemic by using such institutional systems as public health, immigration, education or justice.

Royal Society of Canada, 1988, p. 23

Society's reaction to people w/ AIDS

Eric Smith, 30, an eighth-generation Cape Sable Islander, was a dedicated teacher and community activist. But when a medical leak exposed him as a homosexual and an AIDS carrier, a bitter community protest hounded him from his job and shattered his quiet insular life.

P.B. Donham, 1988, p. 88.

People with AIDS are entitled to the love and support of family and friends as well as institutional care, Ontario Catholics have been told. "The threat of AIDS has caused deep and, in some cases, irrational fears among many people," says a pamphlet being distributed to all provincial parishes. "The result has been that those suffering from this disease may be abandoned by friends and family and find themselves alone and outcast." The pamphlet was issued by the Institute for Catholic Education. It reminds Catholics of their church's teaching that "genital homosexual activity" is sinful, but rejects the notion that acquired immune deficiency syndrome is a judgment upon homosexuals.

The Toronto Star, May 6, 1988

sexual permissive less and potentially dangerous sexual activities. But, this change is occurring at a slower rate than might be expected, especially among heterosexuals. From a public health perspective, the gap between desirable and actual attitudes and behaviours remains unacceptably wide if HIV transmission is to be controlled.

The AIDS pandemic has unique features, but reactions to it have been similar to reactions to historical epidemics such as the Black Death, syphilis and poliomyelitis. All of these caused irrational fear of infection, overprotection of children, persecution of those unfortunate enough to become infected and ill, demands for public health measures to take precedence over individual rights, and controversy over measures that would halt the spread of disease.

HIV infection and AIDS have forced Canadians to confront both a fatal communicable disease epidemic and a moral and social crisis. The development of policies relative to HIV-infected children attending regular school classes, seropositive immigrants entering Canada, seropositive individuals serving the public, and the care given people with AIDS is fraught with controversy and potential conflict. Such conflict derives from the profound complexities of balancing the rights of individuals with the protection of the public's health in the face of moral and religious demands.

To many, AIDS poses the most profound problems of constitutional law regarding public health. To balance the interests of individuals against those of the public for health and safety presents enormous controversy because the interests of both are fundamentally affected by the nature of the disease. The social, ethical and legal implications of isolating people with AIDS, mandatory testing for HIV infection and other means of protecting the public from the spread of this fatal and incurable disease are being debated at all levels of society, in all government jurisdictions and in the medical community.

AIDS and changes in sexual behaviour

Some very substantial behaviour changes have been demonstrated among gay men in recent years. For instance, data from an ongoing study of gays in Vancouver have demonstrated consistent risk reduction [Schechter et al., 1984] and concomitant sharp declines in the rate of new HIV infections. Of all 345 men who were HIV negative at enrolment in that study, a total of 85 (25%) had seroconverted by 1987. The seroconversion rates during five successive 9-month periods beginning November 1982 and ending July 1986 were 4.4%, 9.1%, 5.2%, 4.3% and 1.7% respectively [Schechter et al., 1987]. This sharp decline in acute seroconversions has continued with an estimated annual infection rate in 1987 of 0.9% [Willoughby et al., 1988]. Comparisons of sexual behaviour in this cohort at two time points approximately 2.5 years apart have demonstrated that these declines in seroconversions have been accompanied by marked changes in sexual practices. For example, whereas at the first visit only 2% of subjects reported usually using condoms during receptive anal intercourse, this proportion has risen to approximately 50% within 2.5 years [Willoughby et al., 1988].

R. Fraser et al., 1988, p. 132.

Advice on how to protect yourself against AIDS abounds, but what are women like you actually doing about it? To find out, Self interviewed over 500 heterosexual women (252 were married or living with someone, 264 were single), ages 20 through 45, throughout the country. What we discovered. While some women are backing up attitudes with action, many more have good intentions about taking precautions but less-than-optimal follow-through.

(C) Avery, 1988, p. 80

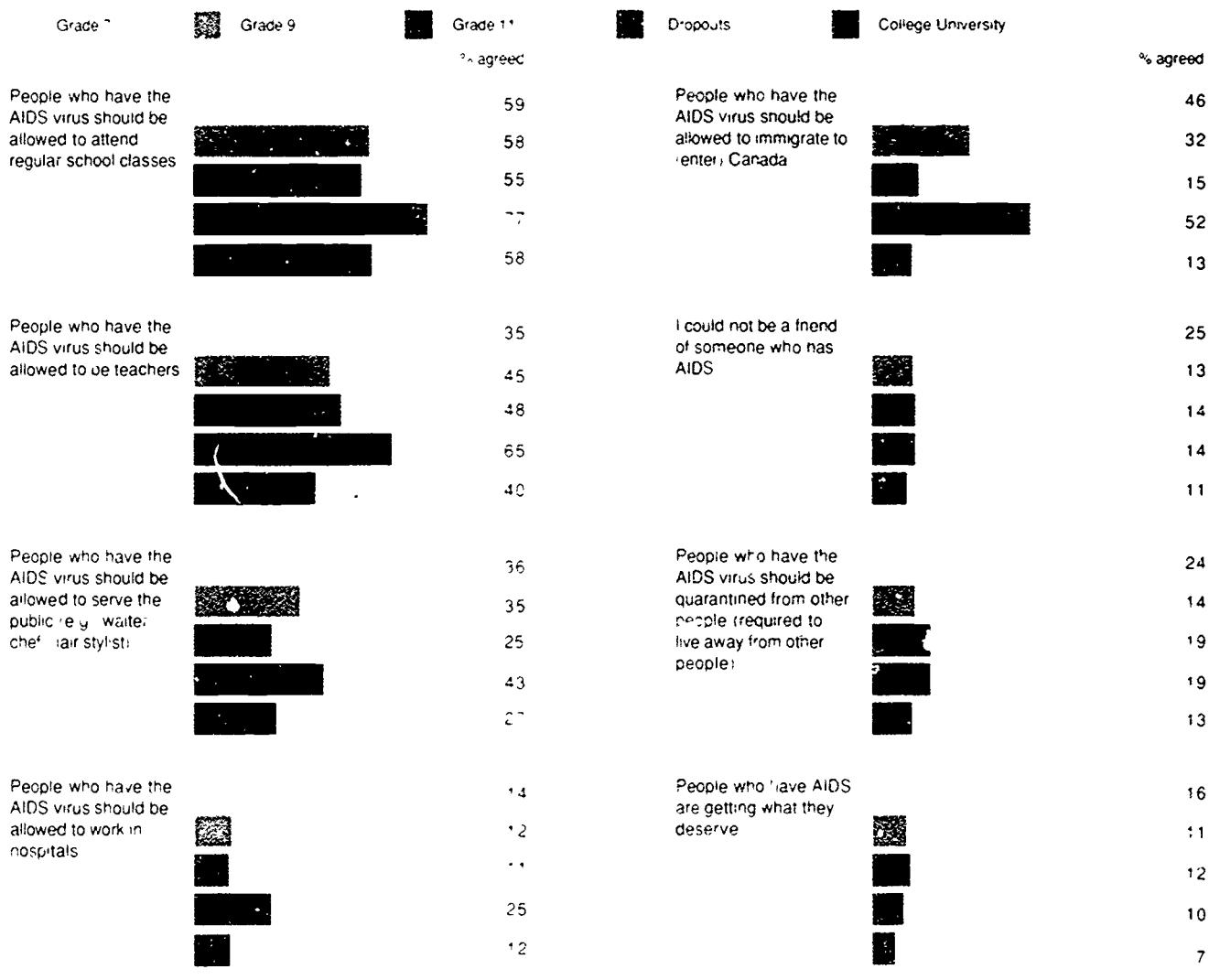
What are the feelings and beliefs of young Canadians in the midst of this complex and controversial ethical, legal, and social crisis? We examined a large number of factors to determine whether youth were more or less tolerant with respect to AIDS-related issues.

B. People with AIDS or HIV infection

To measure young people's attitudes toward people with AIDS or HIV infection, we developed an eight-item scale. The items, presented in Figure 5.1, concern restricting the activities of people with AIDS and those who test positive for HIV, befriending a person with AIDS, and believing that people with AIDS are "getting what they deserve."

Although 55 to 77 percent of young people thought students with HIV infection should be allowed to attend regular school classes, fewer (35 to 65%) agreed that HIV-infected people should be allowed to be teachers. Even fewer respondents indicated that HIV-infected people should be allowed to serve the public generally. Between 25 and 43 percent agreed that they should be able to retain jobs as waiters, chefs, or hair stylists. And far fewer, 11 to 25 percent, would allow them to work in hospitals. It would seem that the closer the potential for contact, the less tolerant young people become.

Figure 5.1
Attitudes toward people with AIDS or the HIV infection



AIDS policy for schools

Students and teachers in New Brunswick who carry the AIDS virus have a right to stay in the classroom and have their condition kept confidential, the provincial Education Department says. Education Minister Jean-Pierre Ouellet, in laying out an AIDS policy for schools, said in a statement yesterday that a student with the virus has a right to attend classes so long as his physical and social behavior is not a risk to others. *The Whig-Standard* (Kingston), September 9, 1988.

Three young AIDS carriers forced from an Arcadia school (Sarasota, Florida) by protests and a mysterious fire that left them homeless will enroll in a neighboring county with one of the nation's first AIDS policies for schools.

The Ottawa Citizen, September 17, 1987.

Students comment on support for persons with AIDS

I won't initiate a friendship with someone with AIDS, but I would stay friends with such a person.

Female, Grade 11.

It's a person's own fault if he or she gets AIDS.

Male, Grade 7.

In the paper and some of the other magazines they're showing how these people were burning down an AIDS victim's home. I think those people don't have anything to worry about because ... just because the person has it you can't contract it. You can't get it.

Male, Grade 7.

Worry about family

I'm worried that my father will catch it because he's working at the hospital right now and he's working on maybe an AIDS victim's blood. He doesn't talk about it a lot because he probably is scared he's going to get it.

Male, Grade 7.

I'm worried about relatives, and especially close family, because I don't know what I'd do if, say my mom or father got AIDS and... . My parents have lived together for a long time and they don't argue or anything and if anything ever happened I'd be really ... like, I'm scared about that.

Male, Grade 7.

I'm kind of afraid of it [AIDS]. I'm scared that I might get it or somebody close to me might get it.

Female, Grade 9

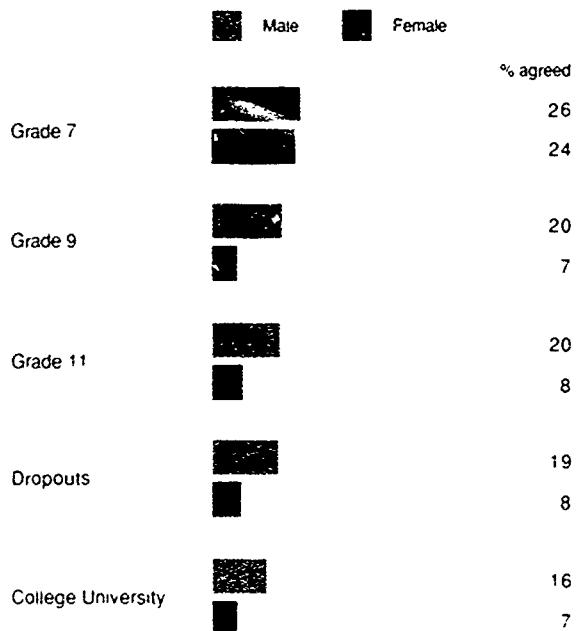
There was a wide discrepancy between the percentage of respondents from one age group to another who agreed that HIV-infected people should be allowed to immigrate to Canada. The percentages of younger students and dropouts who thought Canada should accept immigrants known to carry HIV were more than twice the percentages of Grade 11 and college/university students who would admit seropositive immigrants.

Low percentages of respondents (11 to 25%) agreed with the statement "I could not be a friend of someone who has AIDS." This presents a reasonably positive picture of the social support likely to be available to those who contract AIDS in the future. On the other hand, though relatively low, the percentages of youth who believed that people with AIDS are getting what they deserve (7 to 16%), or that they should be quarantined (13 to 24%), are cause for concern because they indicate that a substantial proportion of youth have extremely negative attitudes toward people with AIDS.

Overall, age did not seem to influence consistently the attitudes of youth toward people with AIDS or HIV. Dropouts did appear more tolerant of people with HIV than any other responding groups, and equally tolerant of those with AIDS. Proportionally, more dropouts than other groups believed HIV infected people should be required to inform others that they are seropositive.

Regardless of age, adolescent females tended to be more positive than their male peers toward people with AIDS (Figure 5.2). Only at the Grade 7 level did similar percentages of males (26%) and females (24%) agree that they "could not be a friend of someone with AIDS." Otherwise, 16 to 20 percent of males, compared with 7 to 8 percent of females agreed with this statement.

Figure 5.2
I could not be a friend of someone with AIDS, by gender



Concerns about homosexuality

We should all ponder, though many may not be prepared to accept, that sexuality is not reprehensible because it is homosexual rather than heterosexual. It is perhaps the case that sexual activity, whether it be homosexual or heterosexual, is immoral when it expresses the trivialization of human beings, or their domination and betrayal, rather than supporting presence, fidelity, and liberation.

D. Roy, 1988, p. 317.

Homosexuality used to be widely known as the love that dares not speak its name. In more reticent religious circles - that is to say almost every denomination in the world - that is still the case. The idea of openly homosexual clergy is largely inconceivable. But in the United Church of Canada, the prospect that gay men and women might step out of the closet and into the pulpit is a real one. Six months ago, a church

port called homosexuality a gift of God and recommended that it not be a barrier to the ministry.

The Globe and Mail, August 15, 1988.

Canadians are almost evenly divided on whether homosexuals should be members of clergy, according to a Gallup poll released today. While 44 percent said homosexuals should be allowed in the clergy, 48 percent said no and 8 percent did not know.

The Toronto Star, November, 1987

C. Homosexuals and homosexuality

Current medical opinion suggests that homosexuality is not a matter of choice and that it is virtually impossible to coerce someone into homosexuality. The fear some Canadians have of homosexuals is in part based on personal defence mechanisms, a lack of knowledge and a concern that young people might be manipulated into becoming homosexual. We anticipated there would be some relationship between young people's attitudes toward people with AIDS and their feelings about homosexuality because, in North America, AIDS has been so clearly linked to homosexual activity.

To measure older adolescents' attitudes toward homosexuals and homosexuality, we developed a scale with four items. These items were concerned with the acceptability of homosexuality from both a societal and personal perspective, allowing homosexuals to be teachers, and feeling comfortable talking with a homosexual person (Figure 5.3).

The item "Homosexuality is acceptable today" revealed perceptions of societal norms, and indirectly, feelings about homosexuality, which were more clearly indicated by the other scale items. About one-third of respondents believed that homosexuality is acceptable today, but 38 to 45 percent of them agreed that homosexuality is wrong, showing that a sizeable proportion of these young people hold negative views about homosexuality. Approximately one-fifth of Grade 7s and 9s reported feeling comfortable talking with a homosexual person. Higher percentages of Grade 11 and college/university respondents indicated they would be comfortable, 29 and 40 percent respectively; and, so did almost one-half of the dropouts. Older adolescents generally had more positive attitudes not only about conversing with homosexuals, but in believing that homosexuals should be allowed to be teachers.

Figure 5.3
Attitudes toward homosexuals and homosexuality

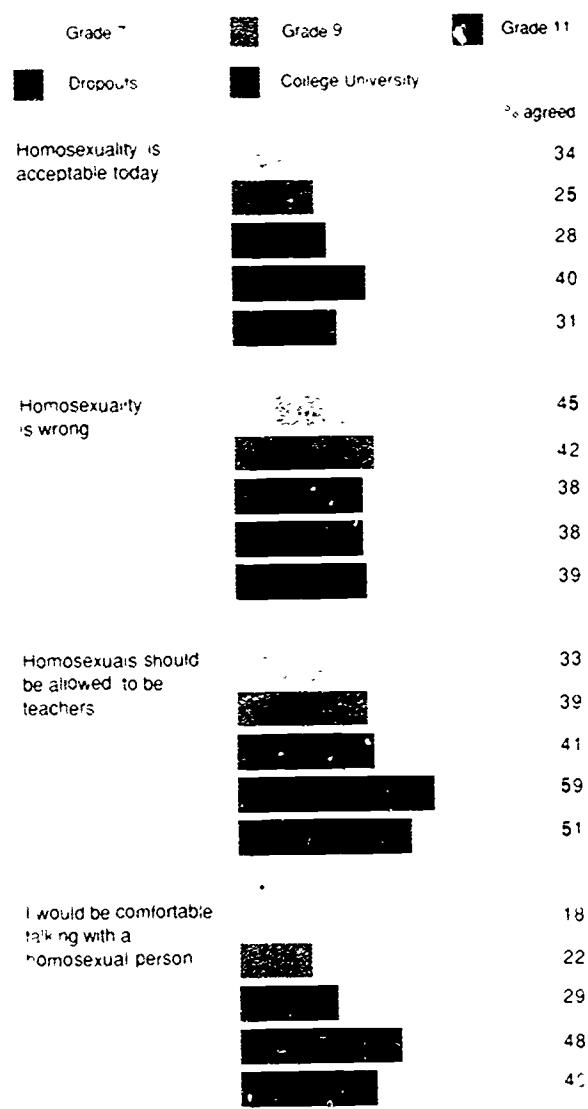


Figure 5.4
Homosexuality is wrong, by gender

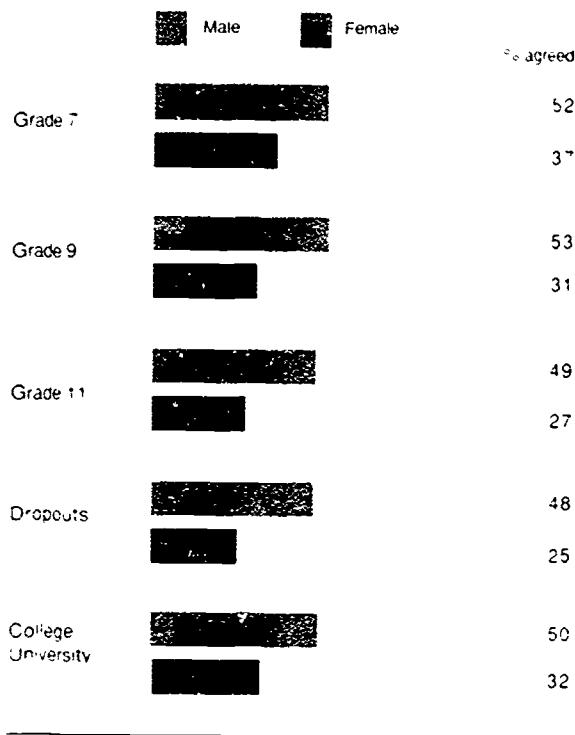
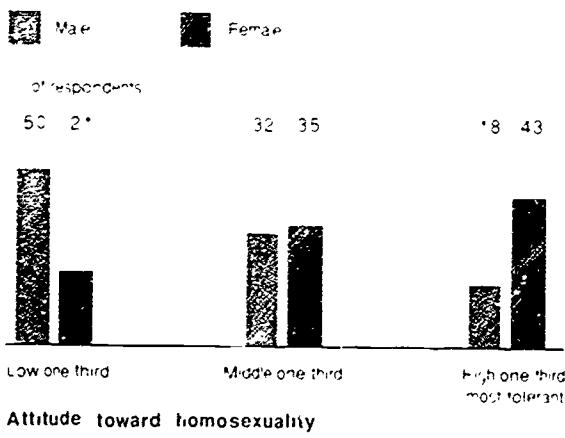


Figure 5.5
Grade 11: low, middle and high scoring groups on attitude-toward-homosexuality scale, by gender



Regardless of age, adolescent females have more positive attitudes toward homosexuals and homosexuality than do their male peers (Figure 5.4). Twenty-five percent (dropouts) to 37 percent (Grade 7) of the female respondents agreed that "homosexuality is wrong" compared with approximately one-half of all the male respondents. Similar gender differences are shown by the data illustrated in Figure 5.5: all Grade 11 respondents were separated into three subgroups based on their scores on the homosexuality scale and compared by gender. Of the Grade 11 male respondents, 50 percent were in the most negative subgroup compared with 21 percent of the female respondents. Conversely, 43 percent of the females were in the more positive subgroup and only 18 percent of the males.

D. Relationship between attitudes toward people with AIDS and toward homosexuality

To examine the relationship between respondents' scores on the attitude-toward-people-with-AIDS or HIV-infection scale and those on the attitude-toward-homosexuality scale, we divided respondents into two sets of three subgroups based on their scores on each scale. We then compared the two sets of subgroups. An example of this type of analysis, using Grade 11 results, is presented in Figure 5.6. Sixty-four percent of the Grade 11s with more negative attitudes toward homosexuals and homosexuality also had the lowest tolerance for people with AIDS or HIV infection. On the other hand, 66 percent of those in the subgroup with the more positive attitudes on the homosexuality scale had the highest tolerance. This attitudinal relationship was strong among the older adolescents, even though over 85 percent of them were correct about the knowledge statement "all homosexual (gay) men carry the AIDS virus."

Students comment on homosexuality

AIDS is the fault of homosexuals.

Male, Grade 11.

Homosexuals are unfairly blamed for AIDS.

Female, College.

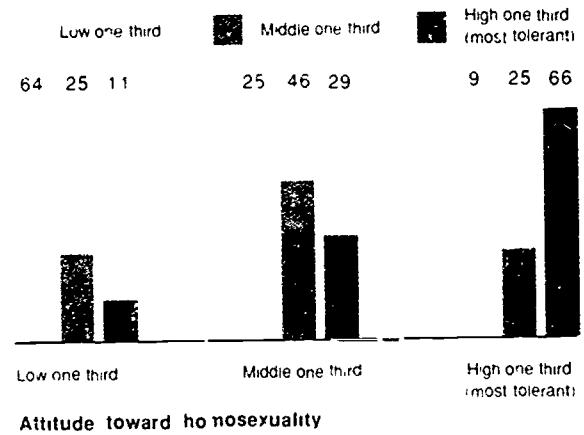
I'm glad to see homosexuals get what they deserve.

Male, Grade 11.

Figure 5.6

Grade 11 scores on the attitude-toward-homosexuality scale compared with the attitude-toward-people-with-AIDS-or-HIV-infection scale

Attitude toward people with AIDS or HIV infection



Sexual mores are changing

As a popular cartoonist put it, AIDS has transformed the language, making previously taboo words like "condom" respectable; and AIDS seems also to be transforming sexual mores: the permissiveness and promiscuity that followed the introduction of the contraceptive pill have begun to give way to greater caution in sexual behaviour and a sharp rise in popularity of condoms as a precautionary measure.

J.M. Last, 1988, p. 12.

E. Sexual permissiveness

Society's sexual attitudes and behaviours in the last four decades have changed considerably, and may come full circle. The sexual conservatism which characterized the late fifties and early sixties gave way to an era of sexual liberation symbolized by the availability of the birth control pill in the late sixties and through the seventies. With this freedom came an increasing concern by medical authorities about the rising incidence of STDs. Now with the fear of AIDS, a return to the sexual conservatism of the past is being advocated. It appears, however, that many of today's young people either do not get the message, do not agree with it, or have difficulty changing their behaviour.

We would expect to find young people's attitudes toward sexual issues changed as a result of the media reports on the AIDS scare. Although we do not have baseline information on a similar population of Canadian youth, we did attempt to design questionnaire items to provide a current picture of young people's views on sexuality.

Changing attitudes

If you're planning on a long-term, I mean very long-term relationship, like 3 months, 6 months ... you're going to test automatically before marriage. People are getting scared of AIDS now. They're slowing down all the things they do.
Female, Grade 9.

In a town like we have you know who's been or who has a good chance of having been around and you know who they've been with....

Male, Grade 11.

It's really weird to have to ask - hey, I want a sexual history kind of thing, but if it's really that important, I think you should.

Female, University.

Figure 5.7 contains the four items related to sexual permissiveness that were presented to Grade 11 and college/university respondents. At least three-quarters of them accept premarital sex in a loving relationship, and, fewer than 15 percent agreed that unmarried people should not have sex. From another perspective, one-half felt that loveless sex is satisfying, and approximately one-fifth of them (fewer college/university students than Grade 11s) would take sexual pleasure wherever they find it. It seems, then, that most of today's youth hold liberal attitudes toward sexual behaviour. Because they generally accept premarital sex, they are likely to resist attempts to persuade them to be monogamous or to abstain from sexual interaction. Limiting advice in this way will not help them develop healthy sexual lives. It appears that it will be imperative to convey the message of "safer sex" while indicating that postponing sexual activity, particularly for those unwilling or not ready to practise safer sex, is clearly an option.

Figure 5.7
Attitudes about sexual permissiveness
(Grade 11 and college/university)

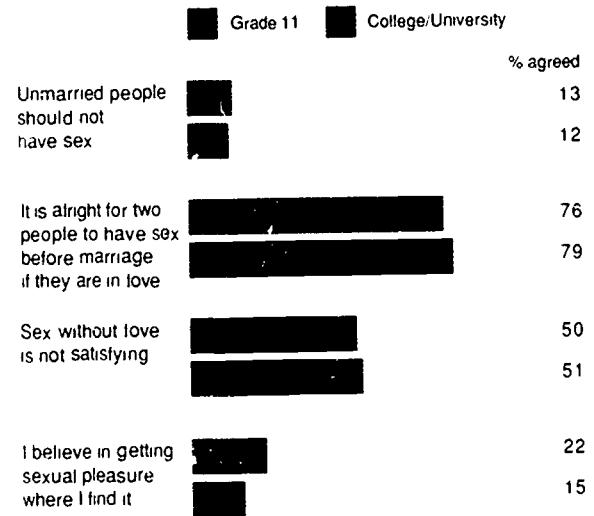
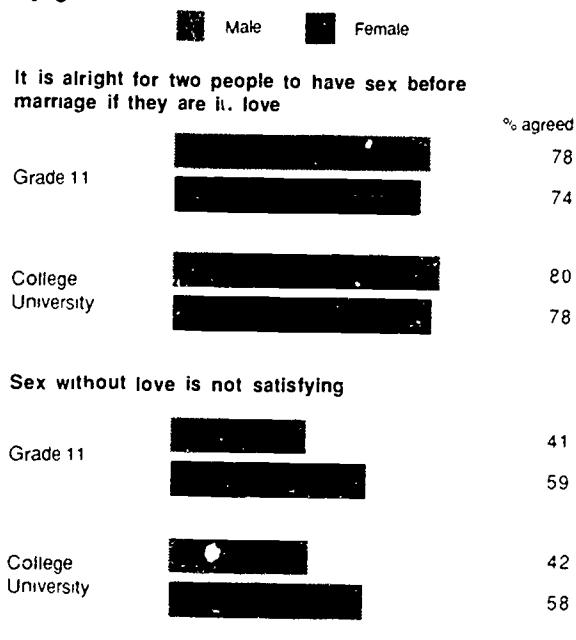
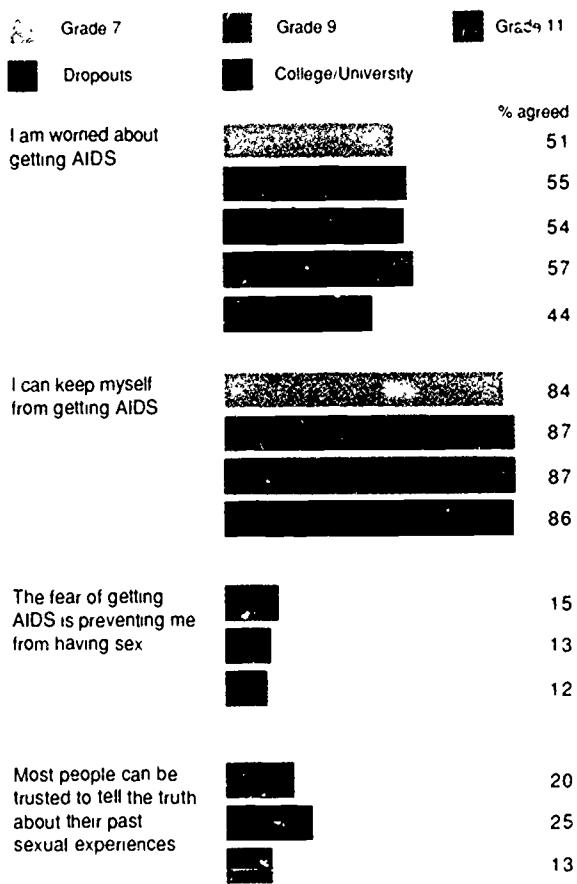


Figure 5.8
Attitudes toward sexual permissiveness,
by gender



Two factors, at least, influenced the sexual permissiveness of the youth in our study: gender and church attendance. Males and females had both similar and significantly different attitudes depending on whether they viewed sex as part of a loving relationship (Figure 5.8). A similarly high percentage of males and females supported premarital sex within a loving relationship; whereas, significantly more males than females would be satisfied by sex without love. About one-third of the Grade 11 and first-year college/university youth who attended church weekly, in comparison to eight percent of those who attend sporadically or never, agreed that sex outside of marriage was unacceptable.

Figure 5.9
Fear of AIDS



F. Fear of AIDS and related attitudes

Do Canadian youth fear contracting AIDS; do they believe they can keep themselves from getting it; do they trust other people to be truthful about past sexual experience; and, is the fear of getting AIDS preventing them from having sex? In Figure 5.9 we present information that begins to answer these questions. Even though a large proportion (84 to 87%) of respondents believed they could keep themselves from getting AIDS, many (44 to 57%) of them worry about getting it.

Among respondents in Grade 11 and college/university and among dropouts, 15 percent or fewer indicated that the fear of AIDS was preventing them from having sexual intercourse. These percentages correspond very closely to the percentages of respondents who do not believe they can keep themselves from getting AIDS. Furthermore, three-quarters or more of the respondents distrusted what others say about their past sexual experiences.

Trust about past sexual behaviour

Asking sexual partners about their health or sexual history is not a reliable means of avoiding AIDS, because many people lie, a researcher says.

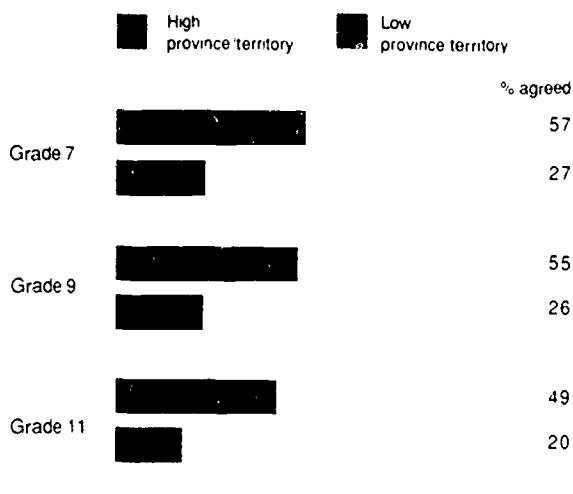
One-third of sexually experienced male college students and 10 percent of women in a study admitted that they have lied to get someone to sleep with them, the researcher said.

"Asking partners about risk factors is probably not a very good strategy for reducing the risk of AIDS," said Susan Cochran, associate professor in the psychology department of California State University at Northridge.

She described results of her survey at the annual meeting on Saturday of the American Psychological Association.

The Globe and Mail, August 16, 1988.

Figure 5.10
*Homosexuality is wrong: ranges of responses
in provinces/territories*



G. Provincial/territorial differences

Responses show that levels of tolerance among young people across Canada toward people with AIDS or HIV infection vary. The Grade 7, 9 and 11 respondents from some provinces/territories tended to be consistently more tolerant than their counterparts from others.

There were much sharper differences with regard to homosexuality. For example, on the item "Homosexuality is wrong," there was, at each of the three grade levels, an approximate 30 percent differential between some provinces/territories (Figure 5.10).

Perhaps not unexpectedly, young people from the province with the highest level of acceptance of homosexuals were also more accepting of sexual intercourse before marriage.

H. Summary

Homosexuality and AIDS are linked together in the minds of many young people, and there is a strong fear of homosexuals among young men.

Young people are concerned about coming into contact with people with AIDS, especially those who serve the public (for example, waiters, chefs, hair stylists, and those working in hospitals). There is certainly no broad acceptance of the idea that teachers or even students with AIDS should be in classrooms.

Young people are generally accepting of sexual activity among themselves and their peers. They would like to see a loving and caring relationship associated with it, but marriage is clearly not a prerequisite for sexual interaction. There is little support for the notion of celibacy or abstinence before marriage.

The threat of AIDS has had some influence on young peoples' attitudes toward sexuality. It has precipitated a general anxiety about sexual behaviour, but, as will be seen in Chapter VI, it does not seem to have substantially affected their sexual behaviour or their willingness to engage in risky sexual activity.

VI Sexual behaviour

Sexual activity of Canadians aged 18 or over

Eighty-six percent of adult Canadians have had sexual intercourse with a member of the opposite sex. Overall, 75 percent are satisfied with their sex life; more specifically, 81 percent of the 18 to 24 year olds are satisfied, and three-quarters of both males and females are satisfied. Seventy percent of Canadians in the 18 to 24 age bracket first had sexual intercourse when they were less than 18 years old; in comparison, this was true of 15 percent of the Canadian public 65 years of age or older and about 40 percent of those aged 25 to 44. And, males are considerably more likely than females to have sexual intercourse before age 18.

Of the Canadians who have had sexual intercourse, 28 percent have had one partner, nine percent have had two partners, 13 percent have had three or four partners, 26 percent have had five or more partners, and 25 percent don't know how many partners they have had in their lifetime. Overall, males have more sexual partners than do females.

Gallup Sexual Lifestyle Survey, September, 1988.

Early sexual expression

Hass (1979) reported ... males and females between the ages of 15 and 18 [were asked] if it was OK for individuals of their age to ... [touch] the breasts and genitals of members of the opposite gender. Ninety-eight percent of the males and 91 percent of the females ... thought it was acceptable for a male to touch a female's breasts. Ninety-three percent of the males ... thought it was OK for males and females to touch each other's genitals. However, only about 80 percent of the females approved of genital touching.

N. Denney and D. Quadagno, 1988, pp. 323-3.

A. Introduction

If this study is to be useful to those developing policies and programs about AIDS and other STDs, study findings about adolescents' knowledge and attitudes toward these diseases have to be linked to data about their sexual behaviour. In Canada, until very recently, little research has been done on sexuality in general and virtually none on adolescents' sexuality. Studies to learn when adolescents begin sexual activity were conducted in Calgary, Ontario and Quebec in the early 1980s, but these were small and little publicized. The widespread concern about AIDS has made it possible for us to collect nationally the data we need to describe this critical part of the experience of young Canadians.

For the past few years young people have been bombarded with information about AIDS. In this chapter we look at how they have reacted to these messages by analyzing their responses to questions about their sexual attitudes and behaviour.

Younger respondents, those in Grades 7 and 9, were not asked about their sexual behaviour in the same detail as Grade 11 and college/university respondents. We asked Grade 7s about hugging and kissing, and Grade 9s about hugging, deep (open-mouth) kissing, petting above and below the waist and sexual intercourse. To these same questions we added one about sleeping together (without sexual intercourse) for the Grade 11 questionnaire; and in the dropout and college/university questionnaire we added questions about oral sex and anal sexual intercourse. All respondents were given the opportunity to elaborate about their "other" sexual experiences.

Hugging, deep kissing and petting are not considered sexual activities through which HIV is transmitted. Being preliminary steps toward sexual intercourse, however, the percentage of young people engaging in them indicates when these steps toward more advanced sexual activity are first taken.

Recent evidence suggests that the chances of being infected with HIV through oral sex are remote but possible under certain conditions. The virus can be transmitted through vaginal intercourse. There is no doubt, however, that the most dangerous sexual activity in terms of contracting the disease is receptive anal sexual intercourse. The risk of HIV infection associated with these activities grows as the number of sexual partners increases and, especially, when they are engaged in without protection.

Illusion of invincibility

It is well known that young people in many instances take unwarranted risks because they are convinced that the consequences "can't happen to me." Thus, even sexually active young men and women who acknowledge their behavior may not take adequate precautions to prevent HIV transmission. The assumption that "it won't happen to me" is so strong that many adolescents engage in behavior such as heavy drinking, driving while intoxicated, and experimenting with drugs. Young people tend to take their health and future for granted and believe that the absence of any symptoms today signifies a permanently healthy tomorrow, without any hints of mortality.

R.P. Keeling, 1987, p. 28.

Young people ignore the threat of AIDS

I think most teenagers just ignore it [AIDS]. They don't really care. They say nobody knows about it and they just continue their life.

Female, Grade 11.

I can't see myself making a decision about AIDS, because I haven't [had sexual intercourse] yet.

Female, Grade 11.

There is this girl I know and she just didn't even know this person. I couldn't believe it when she told me. [I said] "Do you not know what's going on here?"

Female, College.

Figure 6.1
**Deep (open-mouth) kissing at least once,
 by gender**

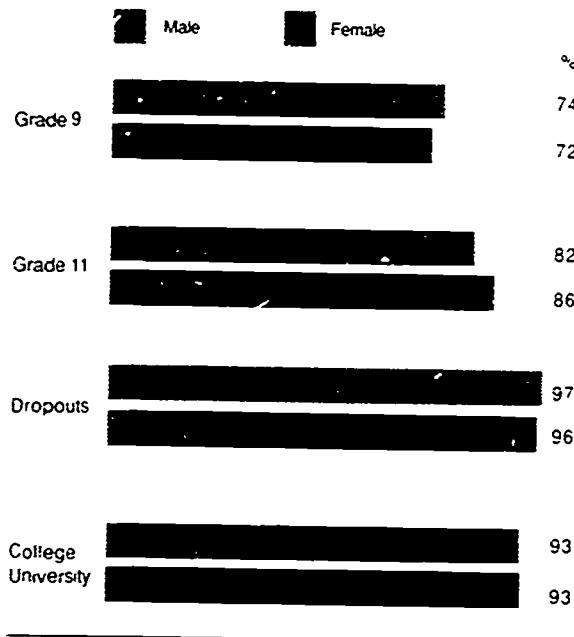
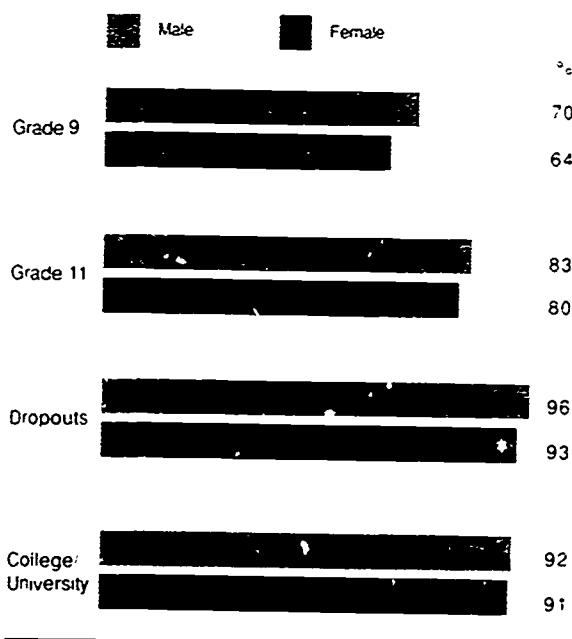


Figure 6.2
**Petting above the waist at least once,
 by gender**



B. Sexual behaviour

Many of today's adolescents are beginning their sexual experiences by age 14 (Table 6.1 and Figures 6.1, 6.2, 6.3 and 6.4). Nearly one-half of the Grade 11 respondents had had sexual intercourse at least once. Although fewer of the younger students had had sexual intercourse, the percentages are high: 26 percent of the Grade 9 respondents (more males than females) and, according to their "other" answers, at least 12 percent of males and eight percent of females in Grade 7. The high percentages of Grade 9 respondents seriously experimenting with sexual behaviour (61% of males and 53% of females) are illustrated in Figure 6.3. When the respondents who had had sexual intercourse are excluded from these data, 30 percent of both males and females had engaged, at least once, in petting below the waist.

Figure 6.3
Penetrating below the waist at least once, by gender

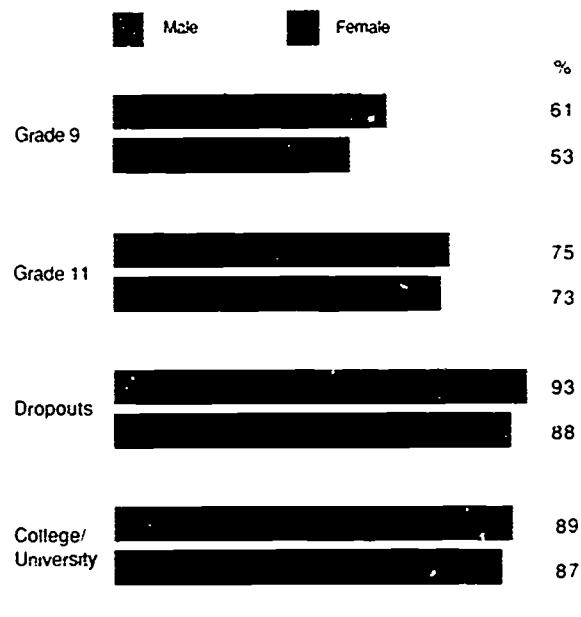


Table 6.1
Males and females who have had sexual intercourse (in percentages)

	Grade 9		Grade 11		Dropouts		College/ University	
	Male	Female	Male	Female	Male	Female	Male	Female
Once	11	6	9	7	5	3	5	3
Few times	13	9	24	18	32	31	26	22
Often	7	6	16	21	52	47	46	49

Dropouts and college/university respondents reported having had sexual intercourse more frequently than the younger ones (Figure 6.4). Over three-quarters of first-year college/university students and dropouts had had sexual intercourse at least once and approximately one-half of them indicated they had often had sexual intercourse.

Figure 6.4
Sexual intercourse at least once, by gender

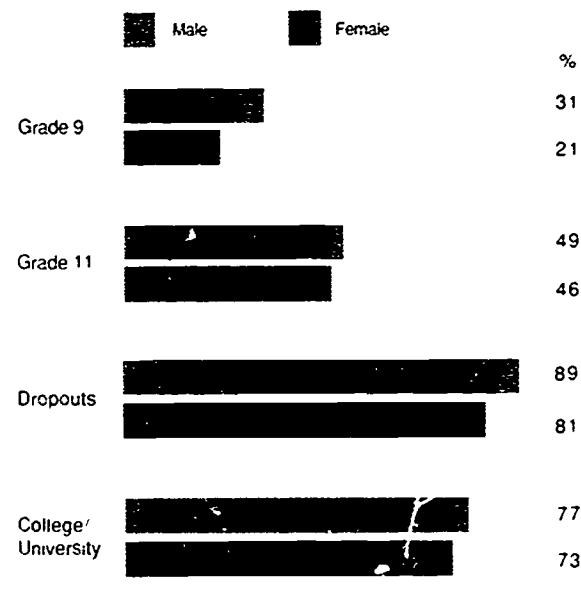
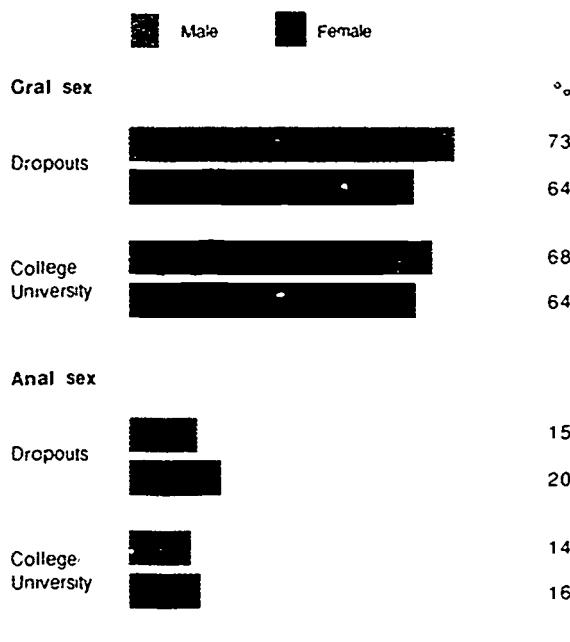


Figure 6.5
Dropouts and college/university respondents
who have engaged in oral or anal sex at least
once, by gender



Oral sex

... use of oral-genital sex among young unmarried men and women has increased dramatically compared with Kinsey's day (Gagnon and Simon, 1987), with the percent of people using fellatio more than doubling and the percent trying cunnilingus rising from 14 to 69 percent (Hunt, 1975).

W. Masters, V. Johnson and R. Kolodny, 1988a, p. 395

... Morrison and associates (1980) found that some of the females they interviewed said that engaging in oral sex allowed them to retain their virginity and still be sexually active. Furthermore, oral sex does not involve the risk of pregnancy that sexual intercourse does.

N. Denney and D. Quadagno, 1988, p. 323.

The risk from a single episode of anal intercourse with an infected partner is considerably higher - probably on the order of one in 50 to 100 (Voeller, 1986).

W. Masters, V. Johnson and R. Kolodny, 1988a, p. 575.

1. Anal sexual intercourse

Approximately 15 percent of dropout and college/university respondents had engaged at least once in anal intercourse (Figure 6.5). And the majority of these respondents said they had had anal sex not just once but "a few times". Twenty percent of female dropouts had had anal sex.

Grade 9 and 11 respondents were not asked about anal sexual intercourse. Regardless, a few of them listed it as an "other" sexual activity they had experienced.

2. Homosexuality and bisexuality

AIDS strikes heterosexuals as well as homosexuals, but the statistics in North America show that AIDS cases are found predominantly among gay men. Those at highest risk of contracting AIDS are men involved in receptive anal intercourse in which there is ejaculation.

Many adolescents have some kind of sexual interaction with other young people of the same gender. It is fairly common for males to have at least one homosexual experience during adolescence. Fewer female teenagers have reported homosexual experiences. Such experiences during adolescence are not considered to be indicative of homosexuality.

Accepting homosexuality

... gay men are more likely than lesbians to have difficulty accepting their homosexuality, which they speculated might be because homosexuality is more often seen by males "as a failure to achieve a 'masculine' sexual adjustment ..." A.P. Bell and M.S. Weinberg, 1978, p. 128.

As a result of government support for gay men suffering from AIDS being slow to emerge, the gay and lesbian community have become a major source of support. Community groups were the first to educate gay men about the dangers of AIDS and the necessity of "safer sex". W. Darrow et al., 1987.

In Hass' more recent study (1979), 14% of the males and 11% of the females indicated having had at least one homosexual experience.

N. Denney and D. Quadagno, 1988, p. 327.

A modern view of homosexuality

Few North American doctors today believe what many did half a century ago: that homosexuality has a physical or mental cause or warrants treatment.

It's widely seen as a normal variant of the potential for human attachment.

In the 19th century in particular, various methods were tried to "cure" homosexuality, including some cruel techniques: sex hormones, castration, aversion therapy. As well, people tried voluntary abstention from sex.

"None of it worked and often it led to suicide," says Dr. Bertram Schassner of New York city, chairman of the human sexuality commission for the Group for Advancement of Psychiatry.

After an unusual vote in 1973 the American Psychiatric Association declared that homosexuality was not to be considered a psychiatric illness. Its diagnostic manual was altered to reflect that.

"In our nomenclature, we don't have it as a mental disorder as long as it is a preferred behaviour," says Dr. I.A. Kapkin of Saint John, N.B., president of the Canadian Psychiatric Association.

The Toronto Star, March 15, 1988.

In this study one percent of dropout and college/university males and females identified themselves as homosexual (Table 6.2). These reports are low; it has been estimated that the number of males in the United States who are exclusively homosexual ranges from three to five percent and the number of females from one to two percent (Denney and Quadagno, 1988, p. 273). However, homosexuals may become aware of their homosexual tendencies during early adolescence, but actually taking on that identity is a more gradual process not generally thought to occur until age 18 to 21. This may partially account for the lower numbers reported in this survey. As young people begin to face the realization that they may be homosexual, they must also come to terms with the fact that they will be judged "disgusting" or "abnormal" by the rest of society. It is, therefore, not surprising that they do not immediately want to admit their homosexuality even to themselves let alone on an anonymous questionnaire.

Table 6.2
Sexual orientation of respondents by gender
(in percentages)

Orientation	Dropouts		College/ University	
	Male	Female*	Male	Female
Heterosexual	97	94	98	98
Homosexual	1	1	1	1
Bisexual	1	3	1	1

* Approximately two percent refused to answer.

University students' sexual orientation

Results of a study of 386 university students indicated that 78 percent of the subjects were sexually active with 95 percent reporting to be heterosexual, one percent homosexual, and 4 percent bisexual.

S. Furney, 1988.

Adolescent homosexuality

The teenager who is worried about being homosexual may deal with it in a variety of ways. Some avoid homosexual contacts while trying to reaffirm their heterosexual identity through dating and heterosexual activity. Others withdraw from all sexual situations. Still others look on themselves as bisexual, consider homosexual arousal a passing phase that they will outgrow, or seek help from a professional.

W. Masters, V. Johnson, and R. Kolodny, 1988a, p. 244.

For adolescent youth who are coming to terms with their homosexuality the process can be confusing and painful. Suicide rates are especially high among this group. One estimate is that 20 to 35 percent of gay teens attempt suicide and as many as 30 percent of teen suicides may be committed by young gays and lesians.

San Jose Mercury News, July 21, 1986.

Bisexual males, along with heterosexual male intravenous drug users, are most likely responsible for the sexual transmission of AIDS to women. Bisexuality has been studied far less than homosexuality and it is difficult to estimate the extent of bisexuality in North American society. The percentage of bisexuals is probably less than five percent. Only one percent of male and female college/university students and one percent of male dropouts in our sample reported a bisexual orientation, but three percent of female dropouts said they were bisexual.

We compared the small groups of homosexual and bisexual college/university respondents with each other and with the much larger heterosexual group on several variables (Table 6.3). A higher percentage of homosexual males, in comparison with their bisexual and heterosexual counterparts, "often" had oral and anal sex, and worried about getting AIDS. Over 40 percent of homosexual and bisexual males had more than five sexual partners compared with 27 percent of the heterosexual males. Of these three responding groups, more bisexual males had considered committing suicide

Table 6.3
College/university students' responses to selected items by sexual orientation (in percentages)

Survey item	Heterosexual	Homosexual	Bi-sexual
Use condoms - most of the time or always (Males)	41	46	48
I am worried about catching AIDS - agree (Males)	47	70	49
I think of committing suicide - agree (Males)	18	24	27
Oral sex - "often" (Males)	28	53	28
Oral sex - "often" (Females)	24	37	40
Anal sex - "often" (Males)	2	19	6
Had an STD (Males)	7	4	15
Had an STD (Females)	8	6	27
More than 5 sexual partners (Males)	27	43	41
More than 5 sexual partners (Females)	15	21	35

and had had a sexually transmitted disease. About 40 percent of lesbians and bisexual females, compared with 24 percent of heterosexual females, "often" had oral sex. A higher percentage of bisexual females, when compared with the other groups of females, had more than five sexual partners and had had a STD. These data are to be interpreted cautiously because the proportion of homosexuals and bisexuals in the sample is small.

Bisexuality

Although there are no firm data on the number of bisexual men in the United States today, we can get some idea from the 1948 Kinsey statistics. Kinsey had men rank themselves on a scale of 0 to 6, where 0 meant they'd had only heterosexual experiences and 6 meant they'd had only homosexual experiences; the numbers in between represented some combination thereof. The study found that 50% of American men were "Kinsey zeros" (completely heterosexual); 4% were "Kinsey sixes" (completely homosexual); leaving 46% who had had one or more homosexual, as well as heterosexual experiences.

C.S. Avery, 1988, pp. 80, 82.

The bisexual male poses a particular threat to the straight woman because he looks and behaves like a heterosexual male. "Nearly all bisexuals" are in the closet, and the AIDS scare has driven them further into it," says Dr. Jack Parlow, a Toronto clinical psychologist specializing in sex therapy. "They remain absolutely tight-lipped through fear of losing their wife, children, relatives and home." During the past few years, researchers have categorized bisexuals into six types according to their patterns of behaviour: married bisexuals ..., ambisexuals ..., identity-confused bisexuals ..., transitional bisexuals ..., convenience bisexuals ... and sexually liberated bisexuals

Chatelaine, October 1987, p. 194.

One problem that bisexuals have is the lack of a real bisexual community. There are enough homosexuals who are open about their sexual orientation today so that homosexuals tend to have support groups and a community of their own. However, since there are fewer individuals who actually define themselves as bisexuals there often are not enough bisexuals to have communities and support groups of their own. Furthermore, bisexuals are frequently rejected by both the heterosexual majority and the homosexual minority. ... Without support groups and a community, being bisexual can be especially difficult [especially if they were faced with AIDS].

N. Denney and D. Quadagno, 1988, p. 308.

Adolescents and sexual intercourse

For some teenagers, particularly for those who "tried" intercourse as a kind of experimentation, once the initial mystery is gone, the behaviour itself is less intriguing. As a result, they may have little or no sexual intercourse for long periods of time - sometimes waiting to meet the "right person."

W. Masters, V. Johnson, and R. Kolodny, 1988a, p. 242.

... a female's first intercourse [is] likely to occur between her sixteenth and nineteenth birthdays ... [and] the majority have very mixed emotions. A recent study by David Weis at Rutgers University found that one-third of young women felt exploited during their first intercourse. Although about two-thirds of the women said they had experienced sexual pleasure, half of this group also experienced high levels of guilt and anxiety. One-third of the total experienced no pleasure at all but *only* guilt and anxiety.

L.J. Sarrel and P.M. Sarrel, 1984, p. 38.

In the last few years, it has become apparent that among sexually experienced teenagers, a group is emerging who are disappointed, dissatisfied, or troubled by their sex lives. Given the name "unhappy non-virgins" by Kolodny and co-workers (1984), this group includes an estimated 30 percent of adolescents who have had coital experience.

W. Masters, V. Johnson and R. Kolodny, 1988a, pp. 242-43.

[In a study to determine the reasons for sexual intercourse by college students it was reported that] 77 percent of the females said they did it to show love for their partner and only 14 percent reported that they did it for physical release. The other 9 percent said that they did it to please their partner. ... Forty-six percent of the men also reported engaging in sex to show love for their partner, only 24 percent said they engaged in sex for the physical release, and 31 percent reported engaging in sex in order to please their partner.

N. Denney and D. Quadagno, 1988, p. 267.

C. Sexual relationships

1. Reasons for/against engaging in sexual intercourse

Young people were asked to choose one of nine possible reasons for not engaging in sexual intercourse. The pattern of responses for Grade 9 and Grade 11 respondents was different from that of dropouts and college/university students (Table 6.4). Secondary school students' choices, ranked from highest percent of respondents to lowest, were: "not ready yet", "fear of pregnancy", "have not met the right person", and "fear of AIDS". Similarly ranked, college/university and dropout respondents' choices were: "have not met the right person", "not ready yet", "religious beliefs" and "want to be a virgin until marriage". There were gender differences in the reasons given for not having sexual intercourse. More females cited "not ready yet" and

Table 6.4
Reasons for not having sexual intercourse by gender (in percentages)

Reason	Grade 9		Grade 11		Dropouts		College/ University	
	Male	Female	Male	Female	Male	Female	Male	Female
Not ready	41	51	33	44	26	32	14	21
Religion	3	2	5	4	6	15	11	12
Fear of pregnancy	21	22	21	20	1	5	5	7
Fear of AIDS	13	8	13	7	6	2	5	2
Fear of other STDs	2	1	2	1	3	2	1	0
Parent's disapproval	3	3	3	3	1	2	1	2
Friend's disapproval	1	1	1	0	0	0	0	0
Virgin until marriage	2	3	3	5	6	7	3	10
Not right person	13	10	18	16	36	21	28	24
Other	3	1	3	1	16	13	30	23

"want to be a virgin until marriage"; whereas, more males cited "fear of AIDS" and "have not met the right person".

The reasons given for first having sexual intercourse were quite consistent for both dropout and college/university respondents, but, as expected, there were gender differences. "Love for the person" was chosen by the highest percentage of females in both groups (Table 6.5). In fact, the percentage of females giving this reason was almost twice that of males. Curiosity was chosen by the second highest percentage of respondents, but by more males than females. For males, especially, physical attraction was an important motivator for having sexual intercourse for the first time. Five to six percent of all age groups indicated that drugs and alcohol were a factor in their first having sexual intercourse.

Table 6.5
Reasons given by dropouts and college/university respondents for first having sexual intercourse by gender (in percentages)

Reason	Dropouts		College/ University	
	Male	Female	Male	Female
Expected by friends	6	7	4	2
Maintain relationship	1	8	1	6
Curiosity	40	20	19	15
Drugs and alcohol	6	5	6	6
Passion	6	8	12	7
Loneliness	0	0	1	1
Love	16	34	27	52
Physical attraction	15	5	28	9
Other	9	9	2	4

Taking risks

[During the 1970s] teenage females became sexually active at younger and younger ages. Although there is some preliminary evidence that this trend may have leveled off [in the 1980s], there does not appear to be any indication that either the genital herpes scare, a swing to political conservatism, or the current AIDS epidemic has convinced most teenagers that abstinence is the wisest course.

W. Masters, V. Johnson, and R. Kolodny, 1988b, p. 137.

Expectations

There appears to be a general expectation among students that they will engage in sexual intercourse sometime during their college career (Komarovsky, 1985) and that sexual involvement will occur within a loving relationship. The exceptions are those who because of their religious beliefs are committed to virginity until marriage.

B. Strong and C. DeVault, 1988, p. 254-55.

Table 6.6
Duration of sexual relationships of college/university students by gender (in percentages)

Relationship	College/ University	
	Male	Female
Long-term serious	63	84
Long-term casual	38	26
Short-term serious	35	30
Short-term casual	49	26
One-night stand(s)	43	18
Prostitutes	4	1

Sex, AIDS and other STDs

Seventy-six percent of the males and 88 percent of the females in the college student sample [in the United States] indicated that they had become more cautious about their sexual activity in the preceding year as a direct result of concerns about AIDS. Specifically, almost three-quarters of the females surveyed said that they would no longer have sex with a partner unless he used a condom, while 49 percent of females who were sexually experienced said that they would no longer have sex with someone they liked unless they felt they were committing to a long-term relationship.

W. Masters, V. Johnson and R. Kolodny, 1988a, p. 254.

The consequences of STDs to adolescents are serious, they include lifelong infection and infectiousness (herpes), pelvic inflammatory disease and sterility (chlamydia and gonorrhea), and death (AIDS).

Adolescents continue to put themselves at risk of sexually transmitted infections. Fisher and Mischovich (1987) surveyed 122 undergraduate men and women and found: 68 percent were sexually active, 49 percent had sexual intercourse with more than one partner in the preceding year, 23 percent consistently used condoms, 50 percent had oral sex without a condom, and 18 percent had sex with persons with whom they were only slightly acquainted. The researchers concluded that a very sizable proportion of these young people recently had put themselves at risk of contracting AIDS and other STDs. (paraphrased)

W. Fisher, 1988, pp. 5-6.

2. Duration of sexual relationships

The stability of sexual relationships in which young people are involved determines indirectly their chances of contracting AIDS and other STDs. Those in long-term, serious relationships are generally more concerned about each other and better able to talk about birth control and about strategies to prevent AIDS and other STDs. Short-term, casual encounters ("one-night stands") involving sexual intercourse are less likely to involve mutual respect or provide the opportunity for either partner to deal effectively with these concerns.

Table 6.6 shows that a large majority of college/university females think of their relationships as long-term and serious. While this finding implies that most would have opportunities to discuss "safer sex" with their partners, it is unclear whether this conclusion can be drawn. Females may define their relationships as more stable than their partners do. More males, on the other hand, indicated they have short-term, casual relationships and "one-night stands." Because "safer sex" may be more difficult to negotiate in these types of relationships, young men, in general, may be at greater risk for contracting and transmitting AIDS and other STDs.

Similar differences between male and female dropouts were found when they were asked about the duration and seriousness of their latest relationship.

3. Number of sexual partners

Of the college/university respondents who had had sexual intercourse (71%), only 23 percent of males and 36 percent of females reported having had only one sexual partner (Figure 6.6). Of the dropouts who had had sexual intercourse (85%), 15 percent of males and 23 percent of females indicated that they had only one sexual partner (Figure 6.7.) Sixty-five percent of sexually active college/university males and 47 percent of females indicated that they had had sexual intercourse with three or more partners. Of the dropouts who had had sexual intercourse 77 percent of males and 65 percent of females reported having had three or more partners.

Figure 6.6
Number of sexual partners of college/university respondents, by gender

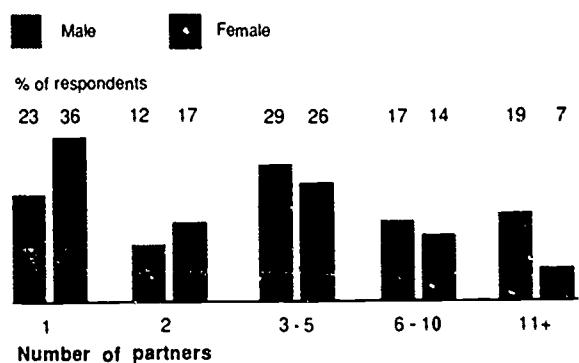


Figure 6.7
Number of sexual partners of dropouts, by gender

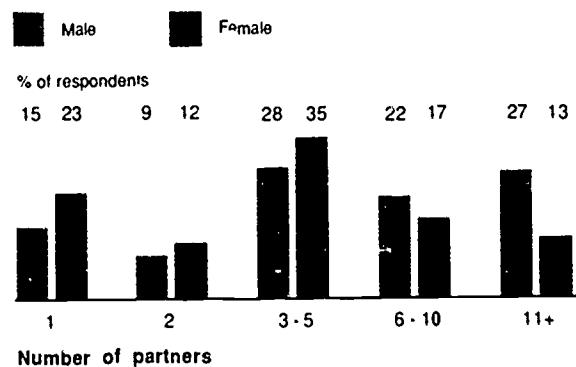


Figure 6.8

Substance use by dropouts and college/university respondents who have not had sexual intercourse compared with those who have had 11 or more sexual partners (19% dropouts; 9% college/university)

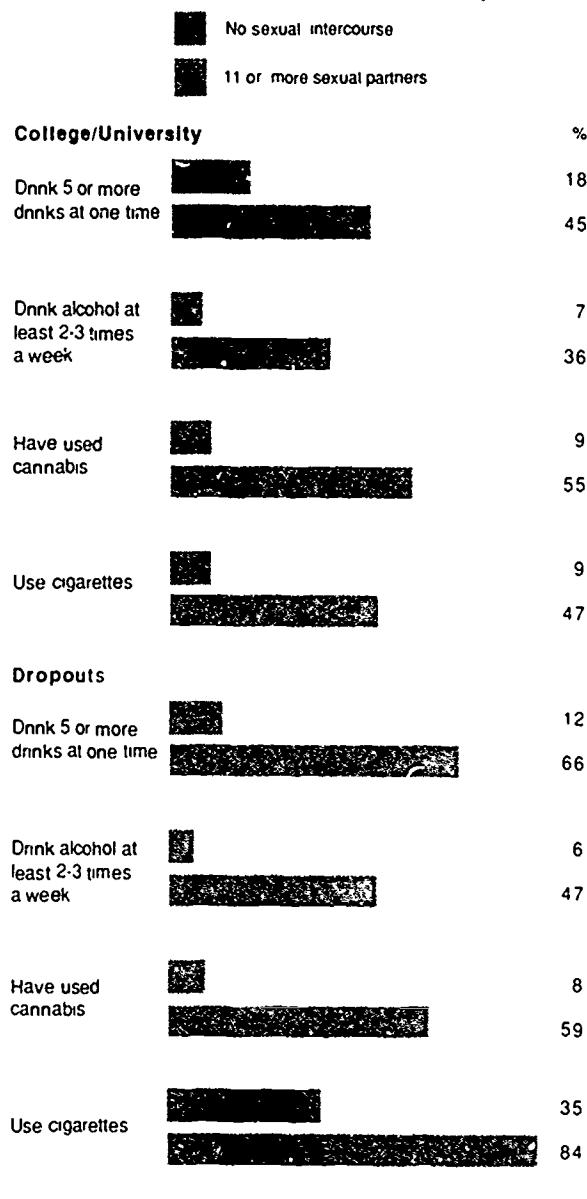


Figure 6.8 shows the drug use of college/university and dropout respondents who had not had sexual intercourse compared with those who had had eleven or more sexual partners. Clearly those who had many partners were more likely to risk damaging their health by using alcohol, tobacco and cannabis. However, in spite of the risks there was little cost in terms of relationships with peers and self-esteem. Those who took more risks tended to have better relationships with their peers and higher self-esteem.

D. STDs

The occurrence in young people of STDs, such as chlamydia, gonorrhea and herpes, to some extent indicates whether young people are practising "safer sex". The presence of STDs, such as those mentioned above, has been shown to increase the risk of acquiring HIV infection in the event of exposure to the virus. Consequently, the frequency of self-reported STDs in our study population is cause for concern: nearly ten percent of sexually active dropout and college/university respondents had experienced at least one sexually transmitted disease (Figure 6.9).

Among the dropouts, 42 percent of the reported infections were gonorrhea; chlamydia was second at 22 percent. About one-third were reported as "other" STDs and genital herpes was a distant fourth at five percent. Surprisingly, about ten percent who reported having had a STD did not know which one they had had.

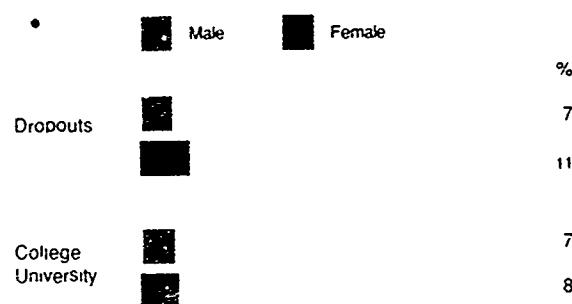
Relationship between STDs other than AIDS and HIV infection

Recent studies have been providing more and more evidence in support of the conclusion that genital ulcer disease increases one's chances of contracting (and perhaps transmitting) HIV (P. Piot, 1988; F. Plummer and W. Cameron, 1988; and W. Stamm, et al., 1988).

Many of those who have examined the association between other STDs and HIV believe that the open sores caused by viruses such as herpes simplex virus type 2 (HSV-2) and syphilis provide easier access for HIV to infect one's system following sexual contact.

AIDS This Week, September 23, 1988.

Figure 6.9
Dropout and college/university respondents who have had a STD, by gender



Sex and drugs

... evidence from several sources indicates that adolescents who use... [illicit drugs such as marijuana] are more sexually experienced than adolescents who do not use marijuana or other drugs (Sorenson, 1973; Jessor & Jessor, 1975, 1977; Kolodny, 1981).

W. Masters, V. Johnson and R. Kolodny, 1988a, p. 241.

Figure 6.10
Alcohol use at least once a week, by frequency of sexual intercourse

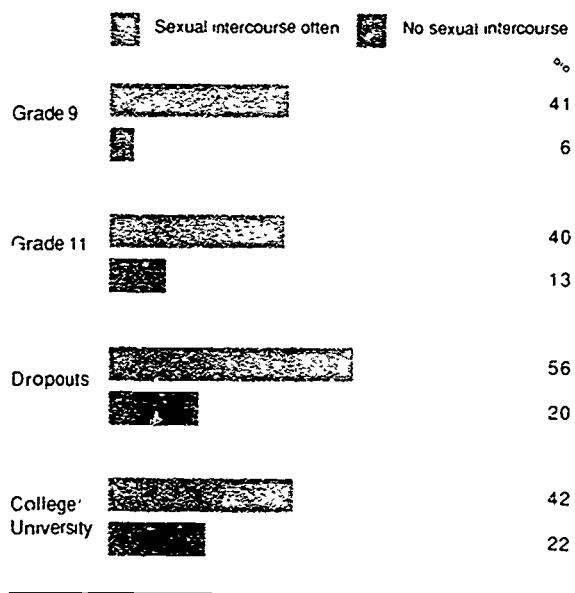
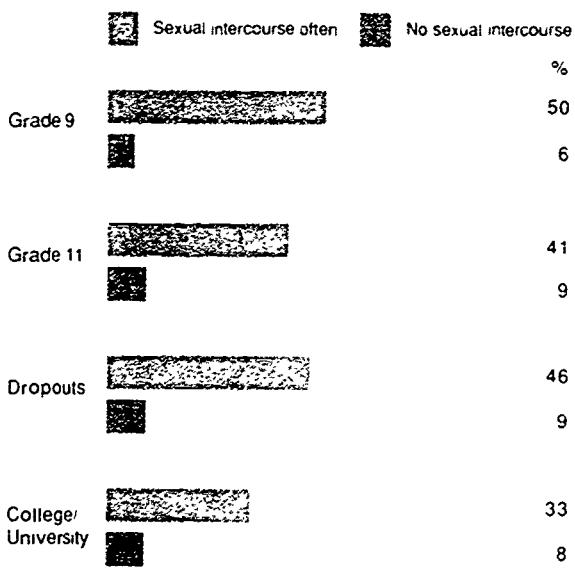


Figure 6.11
Cannabis use, by frequency of sexual intercourse



E. Characteristics of sexually and non-sexually active youth

We looked at adolescent sexual activities in relation to other risk behaviours, demographic factors, and attitude scale scores described in Chapters II and V.

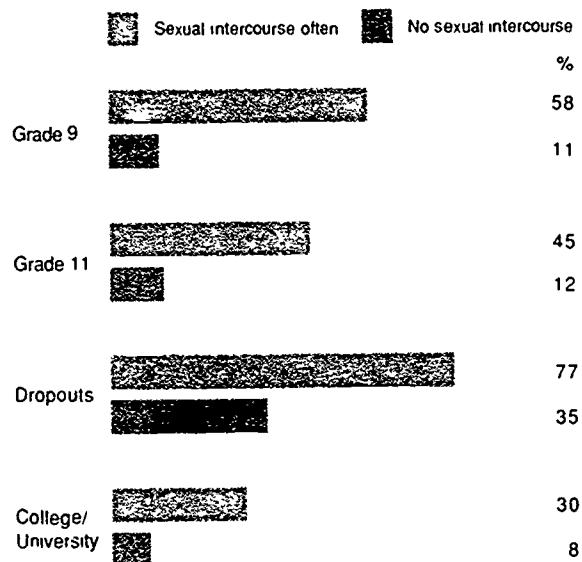
I. Cigarette, alcohol and drug use

Alcohol impairs the judgement needed to take "safer sex" precautions, to say "no" to sexual intercourse, and to use only sanitary methods of injecting drugs into the body. We compared the drinking habits of sexually experienced and sexually inexperienced respondents: many more young people who have coitus "often" drink alcohol at least once a week and the amount of alcohol consumed at one sitting (five or more drinks) was much higher (Figure 6.10 and Table 6.7). For example, one-quarter of the Grade 11 males who have never had sexual intercourse reported drinking five or more drinks at one sitting, compared with two-thirds of those who have often had sexual intercourse. The percentage spread was even wider when marijuana use was considered (Figure 6.11).

Table 6.7
Five or more alcoholic drinks at one sitting, by frequency of sexual intercourse by gender (in percentages)

	Never		Often	
	Male	Female	Male	Female
Grade 9	13	9	70	45
Grade 11	25	13	66	36
Dropouts	27	5	65	42
College/University	24	11	44	20

Figure 6.12
Cigarette use, by frequency of sexual intercourse



Because one-half of the young people who had sexual intercourse "often" also used both alcohol and marijuana, they are at a higher risk for HIV infection. Not only do they have frequent sexual experiences, they frequently take substances that inhibit their intentions and competence to practise "safer sex".

In addition, a higher percentage of those young people who often had sexual intercourse, compared with those who never had sexual intercourse, reported having smoked cigarettes (Figure 6.12).

2. Other risk behaviours

Significantly more young people in Grade 9 who had had sexual intercourse, when compared with those who had not had sexual intercourse, expected to take risks in the future. Higher percentages of them expected to drink alcohol, smoke cigarettes, use marijuana and avoid wearing seatbelts in the future (Figure 6.13). Also, they were significantly more likely to accept offers to ride with strangers and to travel in cars driven by people who had been drinking heavily.

Figure 6.13
Grade 9 respondents who expect to take risks in the future, by frequency of sexual intercourse

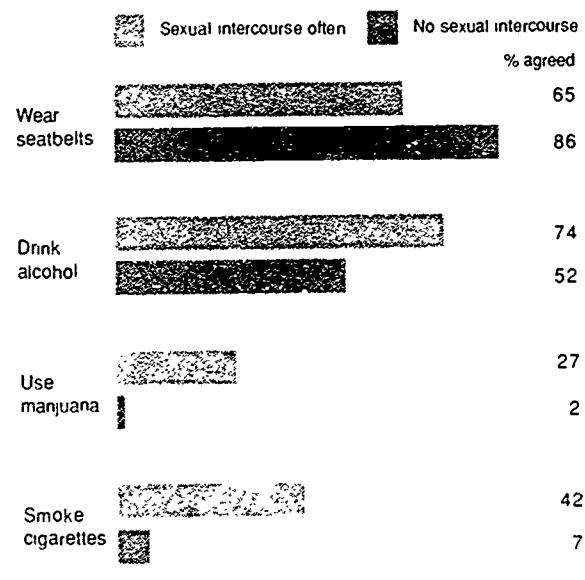
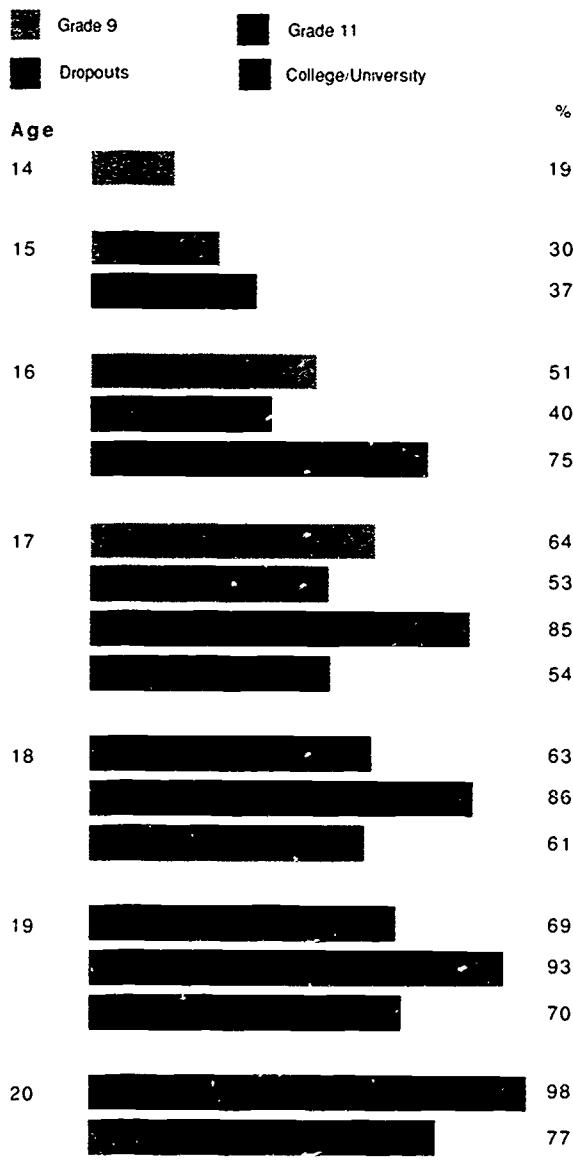


Figure 6.14
Respondents who have had sexual intercourse at least once, by age



3. Age

The older the respondent, the more likely he or she was to have had sexual intercourse (Figure 6.14). However, a person who was 17 in Grade 9 was more likely to have had sexual intercourse than someone of the same age in Grade 11 or in college/university.

The frequency of sexual intercourse also increased with age within each age group. Three percent of 14-year-olds in Grade 9 had often had intercourse; 31 percent of 17-year-olds in Grade 9 had. In the Grade 11 sample 7 percent of 15-year-olds had often had sexual intercourse and 40 percent of 19-year-olds had.

Older respondents who had had frequent sexual intercourse were slightly more likely to know more about AIDS than those who had not had sexual intercourse.

4. Gender

With few exceptions, a greater proportion of males than females reported engaging at least once in sexual activities (Figures 6.1 to 6.4).

5. Educational aspirations

We found that the higher the educational aspirations of the secondary school respondents the less likely they were to have engaged in sexual intercourse. For example, fewer Grade 11s who reported being sexually active expected to attend university, in comparison with those who believed they would leave school before they graduated or would not continue their education past high school.

6. Church attendance

As is evident in Figure 6.15, those young people who had had sexual intercourse often were less likely to attend church regularly than those who had not had sexual intercourse. For example, more than twice as high a proportion of Grade 11 students who had never had sexual intercourse attended church weekly compared to those who had had sexual intercourse often.

7. Attitude toward self and others

We compared the scores, on scales such as the self-esteem, mental-health and relationship-with-peers and -parents scales, of those who had with those who had not experienced sexual intercourse. Having had sexual intercourse was consistently related to significantly higher self-esteem scores among males in Grades 9 and 11 and in college/university; also, that experience was related to higher mental-health scores for Grade 11 males. Among females in these age groups, having had sexual intercourse was related to higher self-esteem scores (Grade 11 and college/university), lower self-esteem scores (Grade 9), higher mental-health scores (college/university) and lower mental-health scores (Grades 9 and 11). For more male than female secondary school students and for post-secondary students in general there is a positive relationship between having sexual intercourse and self-esteem and mental health. These findings could be interpreted to mean that having sexual intercourse has a generally positive effect on other aspects of young people's lives.

Figure 6.15
Weekly church attendance, by frequency of sexual intercourse

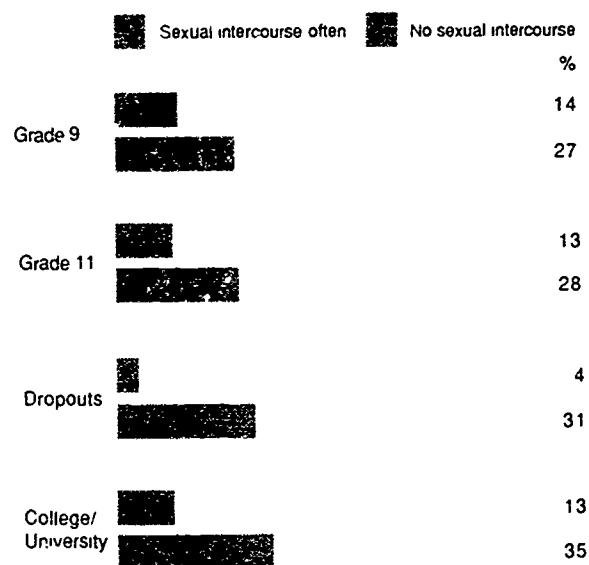


Figure 6.16
Most positive scores on the relationship-with-parent scale, by frequency of sexual intercourse

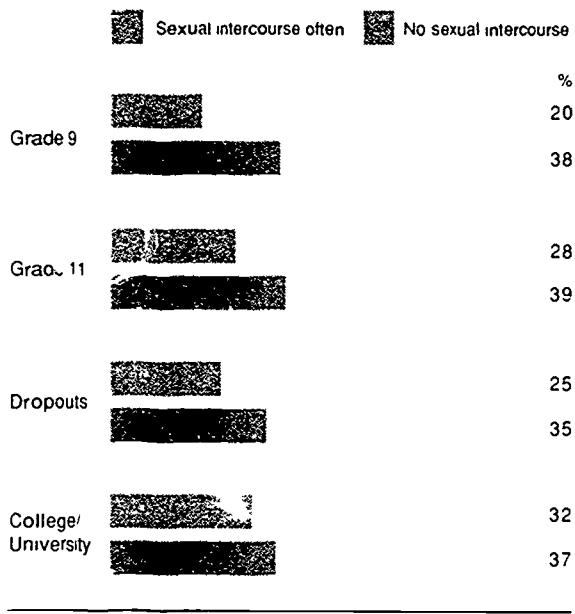
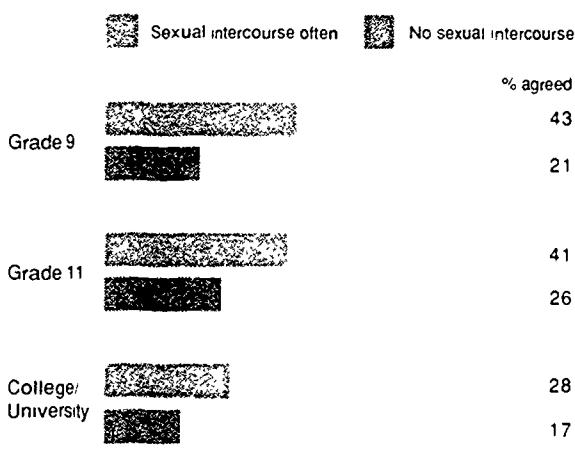
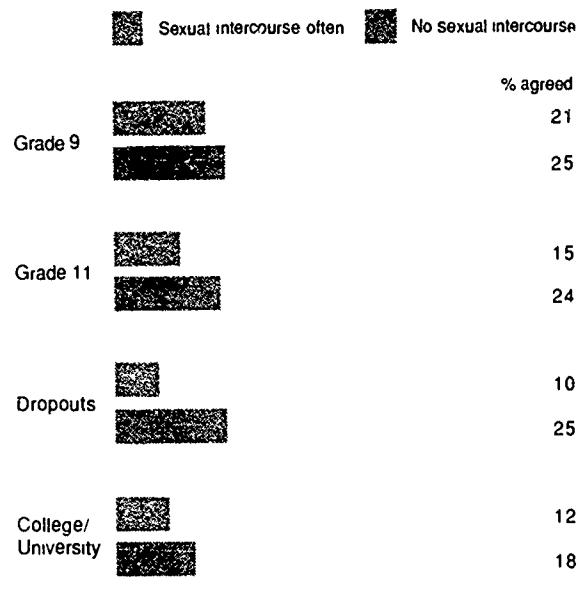


Figure 6.17
I have trouble saying "no", by frequency of sexual intercourse



Very significant differences did occur in the results on the relationship-with-peers and the relationship-with-parents scales. Significantly more of those who had had sexual intercourse achieved better relationship-with-peers scores than those who had never had sexual intercourse. More of the latter group, however, showed higher scores on the relationship-with-parents scale (Figure 6.16). The differences decreased as young people left home for college or university or left school. The potential for conflict because of differing parental and peer values among young adolescents is obvious.

Figure 6.18
If I thought I had a STD, I would be embarrassed to go to a doctor or nurse, by frequency of sexual intercourse



F. Attitudes

How different were the attitudes, particularly about AIDS and other STDs, of those who had had sexual intercourse and those who had "never" had intercourse? The following are some of the important statistically significant differences we observed: those groups who have often had sexual intercourse tended:

- to have a harder time saying "no" (Figure 6.17)
- to be less embarrassed to see a doctor or nurse if they had AIDS or STDs (Figure 6.18)
- to be less likely to ask parents for advice
- to have more negative attitudes about the use of condoms (Figure 6.19)
- to find it much easier to buy condoms
- not to trust as much what the government and media say about AIDS
- to talk more about AIDS and sex with their friends

Figure 6.19
Condoms interfere with sexual pleasure, by frequency of sexual intercourse

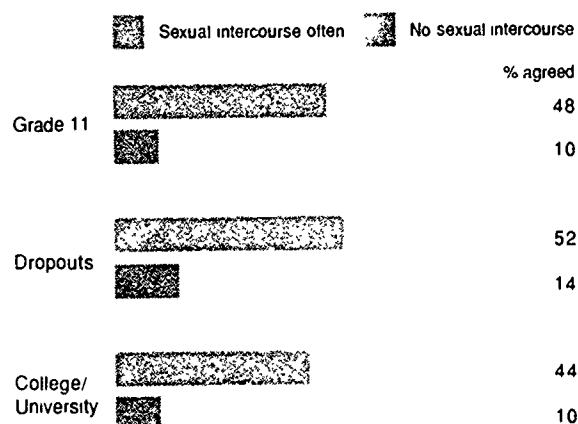
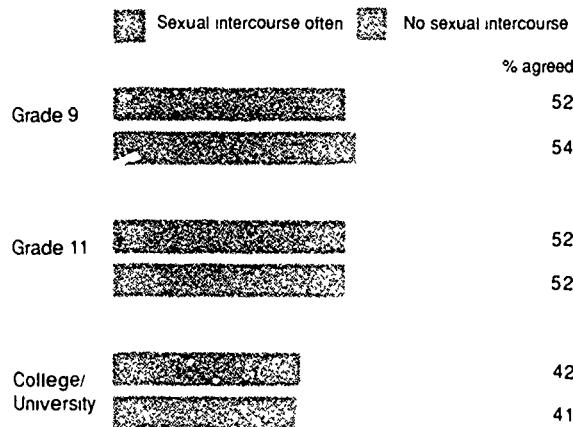
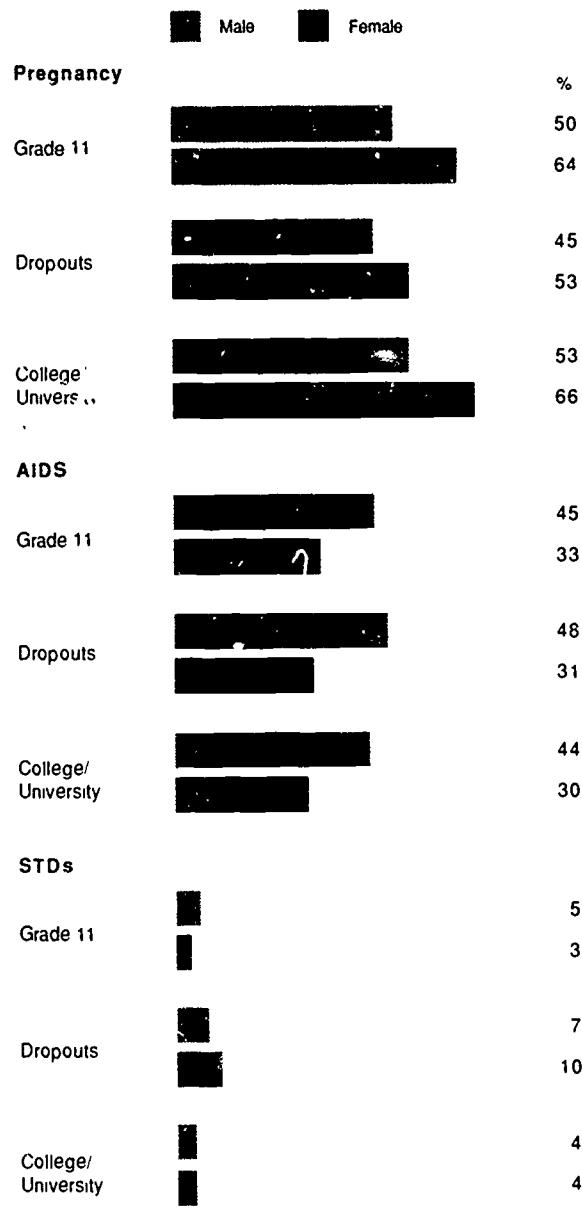


Figure 6.20
*I am worried about catching AIDS,
by frequency of sexual intercourse*



With the vast amount of publicity about the dangers of sexual intercourse, particularly unprotected intercourse (and it is shown in the next section that most young people having sexual intercourse do not protect themselves from AIDS and other STDs), one would be led to believe that young people having sexual intercourse often would be more worried about the consequences of their actions. A surprising finding was that sexually active young people are no more worried about contracting AIDS or other STDs than those who have not had sexual intercourse (Figure 6.20).

Figure 6.21
Outcome of sexual intercourse that worries respondents the most, by gender



G. Worrisome outcomes of sexual intercourse

The respondents were asked which of AIDS, STDs and pregnancy they worried about most as a possible outcome of sexual intercourse (Figure 6.21). Pregnancy was selected most often by all groups. Similar percentages (56 and 60) of Grade 11 and college/university respondents were most worried about pregnancy, compared with 48 percent of dropouts. Only male dropouts worried more about AIDS than pregnancy. Other STDs seemed to be of little concern to both groups, perhaps because they are not fatal and treatments are available.

Condom use

Almost a quarter of the sexually active women in the undergraduate sample said that they didn't insist that their sex partner use a condom while slightly more than 40 percent of the men in this sample indicated they had not used a condom in the past year of sexual activity. Many of these students felt convinced that AIDS was primarily a risk to homosexuals and drug addicts and that it was extremely unlikely to affect them.

W. Masters, V. Johnson, and R. Kolodny, 1988a, p. 255.

Today a large number of women are purchasing condoms and increasingly advertising and packaging reflects this trend. *The New York Times*, June 3, 1987.

A study by P.C.K. Li, MD, and colleagues at the Hong Kong medical and health department among Chinese males found 68% did not use condoms consistently because they disliked them or found them inconvenient or uncomfortable. An ongoing survey by R. Cancelleri, MD, and colleagues at SUNY Health Services Center, Brooklyn, finds only 29% of clinic clients always use condoms. Fifty percent agree: "if my sex partner doesn't mention using condoms, neither will I," and 35% agree: "Because condoms reduce sensitivity, I won't use them."

The Addiction Research Foundation Journal, September 1, 1988.

The students in the Fisher and Miscovich (1987) survey not only practiced high risk sex, they also failed to engage in active STD preventive behaviors. Seventy-six % ... never discuss STDs with potential sex partners, 80 % ... had not limited their number of sex partners, ... and 96 % ... had not decreased the number of unsafe sexual practices they engaged in during the past year.

W. Fisher, 1988, p. 6.

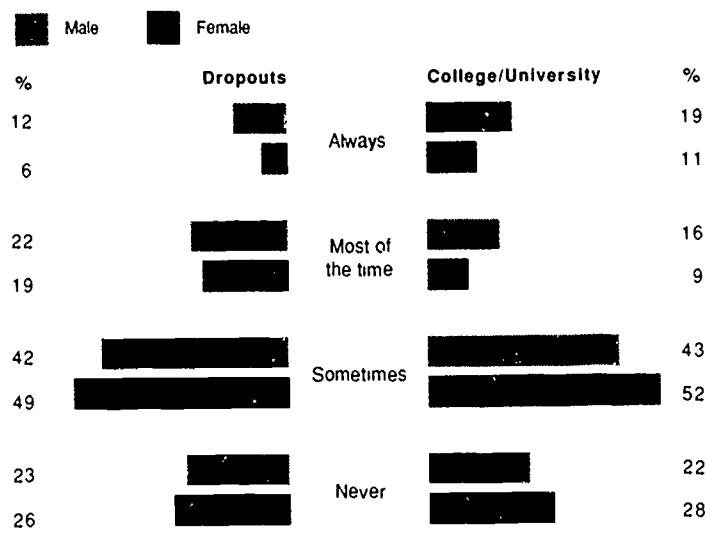
H. Protection

1. Condom use

A substantial proportion of sexually active youth hold negative attitudes toward the use of condoms as can be seen in their responses to the item about condoms interfering with sexual pleasure (Figure 6.19). We also learned that sexually active young people surveyed were considerably less embarrassed about buying condoms than those who had not had intercourse. These attitudes may help to explain the data presented in Figure 6.22; very few males reported using condoms to prevent AIDS and other STDs, and few women reported condom use by their male partners. Approximately nine percent of dropouts and 14 percent of college/university students who "often" had sexual intercourse "always" used condoms. Another 21 percent of dropout and 12 percent of college/university very sexually active respondents used condoms "most of the time." Nevertheless, among the sexually active young people of both responding groups, more than one-quarter never used a condom.

Figure 6.22

Use of condoms by dropouts and college/university respondents who have "often" had sexual intercourse, by gender



2. Testing for AIDS and other STDs

Testing for AIDS and other STDs can be considered a protective measure because it usually leads to early treatment and contact tracing. Testing can also motivate individuals to practise "safer sex", to avoid taking sexual risks and to improve communication between themselves and their sexual partners.

The question of whether they had undergone testing for AIDS or other STDs was only asked of dropouts. A rather high percentage of them, 22 percent for males and 37 percent for females, indicated they had been tested at least once for STDs. In addition, nine percent of males and 11 of females had been tested for HIV infection.

Communication about sex

Adolescents are entitled to a discussion of desire instead of the anti-sex rhetoric which controls the controversies around sex education, school-based health clinics and AIDS education. The absence of a discourse of desire, combined with the lack of analysis of the language of victimization, may actually retard the development of sexual subjectivity and responsibility in students. Those most "at risk" of victimization through pregnancy, disease, violence, or harassment – all female students, low-income females in particular, and non-heterosexual males – are those most likely to be victimized by the absence of critical conversation in public schools. Public schools can no longer afford to maintain silence around a discourse of desire.

M. Fine, 1988, p. 50.

Dropout's comment on lack of protection

There's a lot bigger chance of getting pregnant than getting AIDS. I don't know why. The first thing you think of is getting pregnant.

Female, 16-year-old.

The protection wasn't there, and she was.

Male, 18-year-old.

I'm too lazy to take it [the pill]. I got tired ... I just didn't want to bother.

Female, 17-year-old.

Condoms are unnatural.

Female, 17-year-old.

My friends said it [not using a condom] was a different feeling. I wanted to try.

Male, 18-year-old.

My boyfriend didn't want me on the pill in case people found out, and he didn't like condoms.

Female, 18-year-old.

It was unplanned. I didn't have any protection available.

Female, 17-year-old.

I just don't think about it.

Male, 16-year-old.

I messed up the pills.

Female, 18-year-old.

I trusted my partners [she said she had had about 25].

Female, 17-year-old.

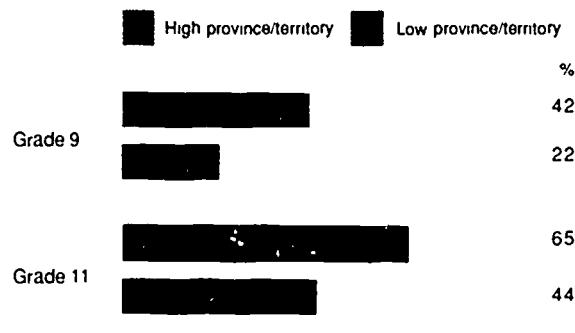
I couldn't wait.

Female, 18-year-old.

I was stupid and impatient.

Female, 17-year-old.

Figure 6.23
Sexual intercourse at least once: ranges of responses in provinces/territories



I. Provincial/territorial differences

Patterns of sexual activity differ across Canada. There is an approximate 20 percent difference between the province/territory with the highest proportion of Grade 9 respondents who had had sexual intercourse and the province/territory with the lowest proportion. This difference is similar for Grade 11 students (Figure 6.23).

Four percent of Grade 9s in the "low" province/territory and 12 percent in the "high" province/territory indicated frequent sexual intercourse. For Grade 11s the proportion of "often" sexually active respondents was 17 percent in the "low" province/territory and 25 percent in the "high" province/territory.

J. Summary

Young people are more sexually active than adults may realize, and as a group, they value sexual experience more than they do chastity. Over one-quarter of Grade 9s have had sexual intercourse and three-quarters of first year college and university students. Eighty-five percent of school dropouts surveyed had had sexual intercourse. Almost one-half of the college/university students had "often" had sexual intercourse.

The proportion of adolescents who engage in sexual activity through which HIV can be transmitted is high enough to warrant concern. Approximately 15 percent of the college/university first year students and dropouts had engaged in anal sexual intercourse at least once. Also, a large proportion of these young adults had sexual intercourse with many partners, usually without protection by condoms.

AIDS is a lower priority concern than pregnancy with the majority of Canadian youth. Unless there is a marked change in protected sexual intercourse, AIDS will continue to make inroads in Canada.

Street kids take risks

Sex more than anything puts runaway kids at risk for AIDS. Homeless kids survive any way they can. Their bodies usually become the currency of exchange... Even if street kids never prostitute they are at risk when they have sex with drug-abusers or prostitutes.

P. Hersch, 1988, p. 32.

Once adolescents are on the street, they can become involved in prostitution, criminal activity, drug abuse or overdose, suicide or murder... Little stands between the runaway and the negative life outcomes of delinquent behaviour, substance abuse and prostitution. For runaways caught in the cycle the bottom line is survival.

C. Hartman, A. Burgess, and A. McCormack, 1987, pp. 294-295.

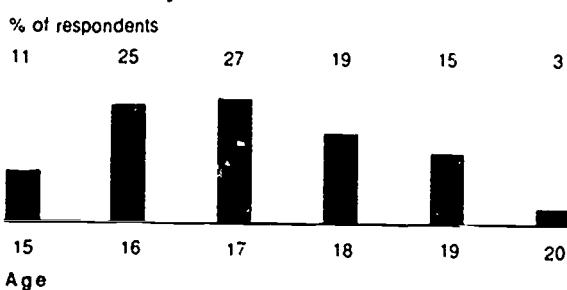
Alcohol and marijuana use were integral to their [street youth] social environment and personal lives.

D.J. McKirnan and T. Johnson, 1986, p. 204.

While on the run youths are exposed to situations of potential exploitation and place themselves at risk for completing several normal developmental tasks of adolescence.

R.L. Young et al., 1983, p. 275.

Figure 7.1
Age of street youth



A. Introduction

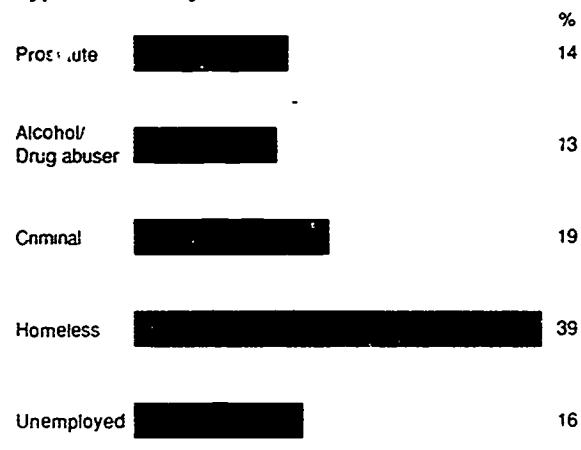
Young runaways who become "street youth" experience negative life circumstances and take risks by engaging in behaviour that could facilitate the spread of AIDS as it has other sexually transmitted diseases (STDs). Adolescents' natural bent to experiment sexually, when combined with drinking alcohol and using drugs, can lead to unplanned and unprotected sex. The sexual experiences of street youth, who belong to an adolescent subculture characterized by sexual promiscuity and substance abuse, are very likely to be spontaneous and dangerous.

In this chapter we specifically analyze the knowledge, attitudes and behaviours of street youth regarding AIDS and other STDs, and consider how their lifestyle exposes them to the risk of contracting and transmitting the HIV and other sexually transmitted infections. We interviewed 656 youth (54% males; 46% females), the majority of whom were between 16 and 19 years of age (Figure 7.1). To represent the diverse elements of street life, we selected individuals from the following five broad categories: prostitutes, criminals, alcohol and drug abusers,

homeless adolescents, and those unemployed seeking job training or school upgrading (Figure 7.2). Needless to say, overlap between these categories was inevitable (see Appendix for methodology details). More detail on the street youth is available in an independent report, *Street Youth and AIDS*.

The implementation of educational programs concerned with AIDS and other STDs for out-of-school street youth poses a difficult challenge for community educators. For these adolescents anxiety about day-to-day survival supercedes concern for a disease like AIDS that may only threaten their lives years from now. Furthermore, traditional intervention methods seem to be inappropriate for this population of transient young people, suspicious of and alienated from "straight" society.

Figure 7.2
Type of street youth



Street youth

The National Statistical Survey on Runaway Youth (Opinion Research Corporation, 1976) concluded, after extensive debate about alternatives, that an acceptable definition of running away should include operational specifications on (a) age of youth, (b) absence of parental or guardian permission, and (c) a criterion on time gone. The first two definitional dimensions have been universally accepted, while the last criterion has not been rigorously defined and specified between studies. The most frequent time criterion includes more than 24 hours or away overnight.

R.L. Young et al., 1983, p. 275.

In legal and clinical terms, the runaway has been classified as a juvenile delinquent.

C. Hartman et al., 1987, p. 292.

Today's radical children are not noted for their political interests or changing morals, but for their persistent and disturbing unwillingness to endure quietly the lives offered by their families, schools, and communities. We call them "runaways," and we treat them, for the most part, as deviants.

R. Johnson and M. Carter, 1980, p. 484.

A youth between the ages of 10 and 17 inclusive, who has been absent from home, at least overnight, without parental or guardian permission [is a street youth]

B. Sommer, 1984, p. 133.

Rejected by society

In general, the longer runaways have been away from home, the more self-demoralizing experiences they have had. Such experiences impinge on their ability to trust, to be calm, and to feel connected and committed to both people and places.

C. Hartman et al., 1987, p. 298.

Running away was clearly an overt act which indicated not only dissatisfaction with a family system but the questioning of an entire sphere of societal constructs... . They perceive the conflict, the manipulation, and the lack of humanness in home and societal relationships... . These youth are saying that we must change.

G. Adams and G. Munro, 1979, p. 367.

B. Background

1. Defining street youth

The term "street youth" calls forth images of young vagrants and street urchins who sleep in alley ways and eat from garbage cans. This is not, however, an accurate portrayal of all street youth. Observation of young people's experiences alerted us to three general patterns of living on the street: some youth literally live on the street, some intermittently run from the supervision of social services, and others live at home but spend a great deal of time on the street.

Almost all of the young people interviewed had, at some point, lived or spent time on the street. At the time of the interview, only five percent of the adolescents surveyed were "hard core" street youth who literally lived on the street, for example, in abandoned buildings, underground parking lots, or parks. This small number is likely more a reflection of our methodology which was based on soliciting youth through agencies rather than an accurate estimate of the proportion of youth living on Canadian streets.

Some young people spend the majority of their time "hanging out" on the street while continuing to live at home with their families and be enrolled in school. These youth appear relatively stable even though they rarely attend classes. Because of their transitional status they are referred to as "curb kids." Twenty-seven percent of the street youth sample were living at home; only a portion of these were legitimate "curb kids." Others who lived at home included young offenders forced to live under their parents' supervision, youth enrolled in employment programs or alternative schools, who were beginning to extricate themselves from the street, and native youth whose culture strongly believes in youth remaining with family regardless of adversity.

Many of the young people on the street normally live under the protection of such agencies as group homes, foster homes, crisis shelters and open-custody facilities. One-third of the youth interviewed in the present study were living in agencies. Many "system kids," so named because they are raised within the social service system, are familiar with street life and sometimes run away for days at a time. Others, like "curb kids," return to the agency after spending most of their time loitering or working on the street.

Running to the street

I started running when I was 12. When I was 15 I slept in ditches and on benches for about a month. I just ran away, and now I'm living with my boyfriend's parents.

Female, 17-year-old, Homeless.

I was on the street for three years, back and forth [home to street]. I've been away [from parents] for four years, since I was 10. Went to parents for one week recently, but they're alcoholic and violent. So I was on the street for four and a half weeks before coming here.

Female, 15-year-old, Prostitute.

I'm a system's kid. I lived with my mom 'til I was 13 then went to a foster home, an aunt's house, a receiving home and a group home between the ages of 13 and 16. Right now I live in a bachelor apartment with my mom and two of her male friends.

Female, 17-year-old, Homeless.

I got kicked out because of drugs so I went to a shelter. Got bored, there wasn't enough drugs and alcohol at the shelter and too many rules, so I went downtown.

Male, 17-year-old, Alcohol and drug abuser.

Family background

Economic stability does not necessarily bring personal happiness or satisfaction, since many runaways come from middle and upper income families.... Youth from a variety of home backgrounds have chosen this alternative.

G. Adams and G. Munro, 1979, p. 366.

Adolescents who leave home are more likely to come from low income families, and the lowest rate of running away is in the middle-income status....

B. Sommer, 1984, p. 133

Homes that spawn runaways are typically marred by high rates of internal conflict, divorce, residential mobility, and death.

R. Johnson and M. Carter, 1980, p. 485.

2. Home background

Most of these young people grew up in Canadian cities or city suburbs (80%), although only one-third came from large metropolitan areas like Toronto or Vancouver. They gravitated toward these larger centres where street life was abundant and anonymity was guaranteed. Contrary to our expectations, these adolescents had been exposed to a negligible amount of uprooting during their younger years; only ten percent of the youth had moved a great deal. As children, 58 percent of these young people had attended church regularly perhaps suggesting that their families were more traditional and stable than one might suspect.

Most of the parents of the street youth we interviewed were Canadian born (80%). Researchers are not in agreement on the socioeconomic status of families of street youth. In our sample over one-half of the adolescents were from middle-to-upper-class homes. Approximately 18 percent of their parents had completed post-secondary education and just less than one-third of them had graduated from secondary school.

Leaving home

Homer (1973) indicates that there are two classes of runaways: the "running from" individuals, who could not deal with a home situation and felt they must leave; and the "running to" individuals, who sought experience forbidden in the home . . . Whether they be "escapists," or "dropouts," it is evident from the number of runaways in America that most experience unhappiness and conflict.

G. Adams and G. Munro, 1979, p. 366.

There is also the category of "throwaway" - youth categorized as runaway but who in fact have been overtly rejected by their families.

B. Sommer, 1984, p. 135.

These youth are reflecting a growing trend across many social classes and situations which indicates the problem may not be one of simple situational causation, but a question of challenging an entire social system.

G. Adams and G. Munro, 1979, p. 362.

3. Reasons for leaving home

Many young people do not run to the streets but rather from their homes. This is contrary to the commonly held belief that they are simply runaways who have refused the responsibility of education and employment. Some aspects of street life which attract today's youth are similar to those that drew young people to the counter culture movement of the sixties and seventies. Living on the street is perceived by some adolescents as an opportunity to denounce society's values and declare their disassociation from traditional lifestyles.

During our interviews we discovered that the majority of the street youth in the study stated that they had left home because their parents threw them out or drove them away. The reasons children were forced to leave home included conflict with a new step-parent, their family's economic hardship, and their inability to adhere to parents' rules. More severe situations were reported by those young people who were driven out of their homes because of alcoholic and drug-abusing parents, experiences with physical and/or sexual abuse, or parents who imposed high expectations and unrealistic rules.

Young people talk about leaving home

My mom kicked me out. She was smoking up and she said to me and my kid sister, out of the blue, to pack up and get going. So we went to my grandmother's for the night. We didn't want to stay there because my grandfather sexually abused us. We ran again and went to my girlfriend's, then to the street.

Female, 17-year-old, Prostitute.

After fighting both verbally and physically with my mother's boyfriend I was kicked out of my home in St. John, N.B. He beat up my mom and I threw him down a flight of stairs and put him in the hospital. I went to Toronto where I lived with relatives and in hostels.

Female, 19-year-old, Homeless.

I've been in and out of foster and group homes and now I'm on the street. When I went to high school they wanted me to see a psychiatrist to see if I was retarded or something. I was sent to a psychiatric ward in Dartmouth for a 30-day evaluation and I failed. I stayed for three or four months, then left and broke into a house. I had to go to a ward at the Nova Scotia Hospital. They put me on medication for hyperactivity. All I did was sleep and eat - they tried to charge me with unmanageability.

Male, 19-year-old, Homeless.

I've never lived on the street [lived at home]. A year ago a friend said let's go downtown; before that my life was boring. There was major stuff going on down there. Met drug addicts and hookers, things I'd only seen on television before. I was hooked, used to just be there and talk to everyone then go home.

Female, 17-year-old, Alcohol and drug abuser.

Family relationships

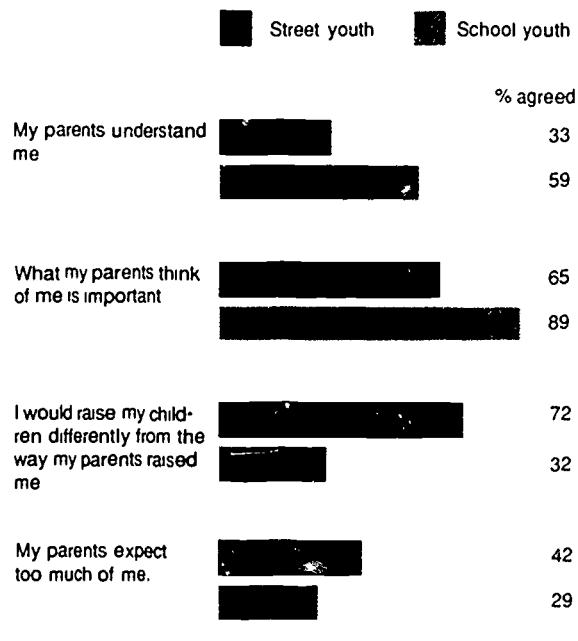
Street people have widely varying relationships with their families. Some report being the family's "black sheep," cut off from all financial or social support as long as they fail to meet important parental expectations concerning education, employment, and life-style characteristics.

S. Segal, J. Baumohl and E. Johnson, 1977, p. 393.

Many runaways view themselves as in conflict with their parents' value system. Communication is poor. The adolescent's role is not perceived by the adolescent as central to the family constellation. The adolescent perceives his identity as waning, unfixed, diffused. Therefore, the youth runs to find himself.

G. Adams and G. Munro, 1979, p. 369.

Figure 7.3
A comparison between street youth and school youth and their relationship with parents



Conflict and negative relationships were repeatedly evident between parents and these children who eventually ran to the street. We compared the responses to statements regarding relationship with their parents of street youth respondents and those of the same age who were in school. Their responses to all statements reflected the street youth's greater negativity toward their parents (Figure 7.3). The street youth felt their parents did not understand them and placed less importance on their parents' opinion of them. Parents' expectations were considered to be higher by street youth, an issue which was often central to their leaving and to their subsequent rebellious behaviour. Almost three-quarters of them said they would raise their children differently from the way they were raised. The youth themselves attributed many of their immediate problems to crises at home.

C. Street life

We spoke with street youth about what they do on the street, how they survive and the importance of friends. Their personal disclosures, presented here, offer a special insight into the street youth subculture.

1. Use of time

Day-to-day activities revolved around "hanging out" with street friends at drop-in centres, arcades, community recreation centres and shopping plazas. The majority of these adolescents did not attend school: they had quit either because they did not like it, they had been expelled or family problems were too distracting. Very few admitted that they were too far behind to graduate although one of our previous studies revealed this to be the primary reason young people leave school before graduating. These street youth suggested that running to the street made school attendance next to impossible. When they were not working on the streets they consumed alcohol or any substance available to them, for example, antihistamines, gravol, PAM cooking oil as well as acid and hashish. If they had sufficient funds they attended normal adolescent functions like movies, concerts and parties.

2. Meeting basic needs

Because making money was a primary concern for these youth, they resorted to panhandling for change and an assortment of criminal activities like prostitution, drug dealing, breaking and entering and petty theft. Some adolescents practised occasional prostitution: they spoke of working the streets when they were desperate for cash. Other more stable young people worked part-time, received welfare or enrolled in student employment programs that paid a small amount of money each week.

Daily activities

On the street you wake up at 2:30 p.m. You get up and smoke a couple of cigarettes. Four or five of us will go and panhandle, then all go get something to eat. If we have enough money we might do something different like go roller skating or to a movie [once a week].

Male, 17-year-old, Homeless.

I was with this group of guys and we use to do "B and Es" [break and enters] and assaults. Ya, like we'd beat up punks and skins. I'd just stand and watch most of the time but sometimes I'd join in. We used to break into drug stores and steal "Ts and Rs" [talwin and ritalin] - go downtown and sell 'em.

Male, 17-year-old, Criminal.

I'd wake up early because I'd be too embarrassed to see anyone. I'd hang out on back streets all day. Friends would buy me coffee and we'd talk - I'd get high. I was never depressed, I'd hide it by laughing and carrying on. I started breaking down. By three a.m. we were looking for a cubby hole. People started telling me I was sick even though I wasn't dirty. I just wanted to get in a bed and stay there.

Female, 18-year-old, Homeless.

Making money

[I] lived on Toronto streets for six months. I just thought of scams like "save the whatever" cans you see in stores. I used to go in and steal them. It was low!

Male, 17-year-old, Homeless.

I work temporary services, usually a couple of days a week, general labour. Panhandling, too; at Christmas and in the summertime you make a mint.

Male, 18-year-old, Unemployed.

[I] work the streets everyday, every second day. Easy money, it comes fast. I'm going to get out of it, but I want to get as much money out of it as I can before I stop.

Female, 16-year-old, Prostitute.

I sell myself for sex, only to women. I go down to the Royal York to a bar there. Women approach you, have to spend the whole night with them. Usually older ladies buy you things and you can get 100 bucks a night.

Male, 18-year-old, Homeless.

I'm more straight than bisexual. I sway only if I'm desperate for cash.

Male, 19-year-old, Homeless.

Food and shelter

I lived on the street for five months. I stayed with friends for awhile, but it was hard for me to depend on them. I left and slept in a ticket booth for about a month, till I got caught. Then I stayed in an abandoned shed in the woods. It was nice; it had a bed and everything. A friend moved in with me for awhile. It was too cold to sleep long. I was up at 6:00 a.m., [and would] go to the train station and wash. I was always clean. Or, I'd go to restaurant bathrooms. I could also get into clubs at night and lock up a stall for the night and sleep there. I'd go out when the sun was out.

Female, 17-year-old, Alcohol and drug abuser.

[I'm] sleeping in stairwells right now. Sometimes I live with partners I work the streets with. [I] spent three months in jail last winter for a break and enter.

Male, 17-year-old, Prostitute.

On the street I sleep in the cave [underground parking lot]. I'll get a place on and off, then lose it. [I've] been on the streets a couple of months now.

Male, 17-year-old, Prostitute.

I stole food from grocery stores. But most of the time I didn't eat.

Female, 17-year-old, Homeless.

Most placed low priority on eating, preferring to spend money on drugs and alcohol. While living on the street, young people tended to eat every few days by stealing food from grocery stores and restaurants or by relying on free meals from friends who worked or still lived at home. These young people did use food vans that offered hot food to people on the street, but many were not familiar with the term "soup kitchen," and most had never been to one. Perhaps these are frequented only by an older street crowd.

Intermittently, youth went to shelters and hostels where beds and free meals were provided. If they had money they opted for cheap hotels and rooming houses. Others slept at friends' homes or rented apartments with friends until their funds ran out. While they lived on the street, some young people told us they slept in abandoned buildings, underground parking garages, and in stairwells with their street friends.

3. Friends

A group of people can more effectively work at getting money and food; therefore, street friends are valuable assets. Most important, though, street youth live in groups on the street for protection from other street gangs who may try to attack their "squats" (sleeping

Friends

The individual who is not adept at making friends, or who lacks practical intelligence and integrity, will have a difficult time on the street. ... While charm and "personality" are valued, it is competence, trustworthiness, and a sense of responsibility which makes an individual attractive and economically successful. These are the pivotal expectations of street life.

S. Segal et al., 1977, p. 390.

Influence of peers

There is a strong relationship between an adolescent's drug use and that of friends, especially for alcohol and marijuana. (p. 132) Disturbed family relationships coupled with poor school performance, and time spent with antisocial peers who themselves run, markedly increases the likelihood of an adolescent running away from home.

B. Sommer, 1984, p. 137.

Talking about street friends

We're a close bunch (guys and girls) - they'd let me live with them for nothing. When I don't have money I move on to another friend's or a hostel. That's where I'm going tonight; I haven't been downtown for awhile. I'm proud that amongst my friends we express our love. We go to parties and hug and stuff; I need that.

Male, 17-year-old, Homeless.

My downtown dad, me and my street sisters are close. I'd always have a place to crash if I didn't go home.

Female, 17-year-old, Alcohol and drug abuser.

*I've been on the streets for six months now. You get closer to your friends when you're on the streets, you depend on each other. One group of you will be panhandling for food another for a mickey. You need each other and look out for each other. It's not really gangs of people, gangs have leaders, the people I'm with aren't like that. Like in the book *The Outsiders*, there's a fighting snarling pack of people - 'cause everyone wants to be the leader. We aren't like that. We do our own thing.*

Male, 17-year-old, Homeless.

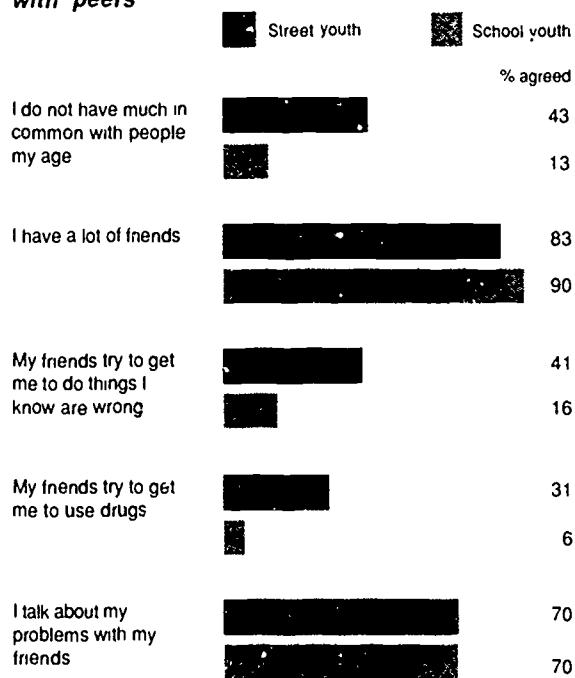
Everybody needs something to identify with. Some of the ideas behind "punk" are a strong belief in one's self and friends rather than money and power. A punk is in it for himself, but also in it for his friends.

Male, 18-year-old, Homeless.

quarters) to rob and beat them. Particular sub-groups within the street youth population are more likely to need this kind of support from friends. Prostitutes, for example, face the possibility of being sexually or physically assaulted by customers and pimps. As girls leave with their "johns" (clients), "spotters" try to ensure their friends' safety by recording each client's description and licence plate number. In essence, street friends become family, depending upon one another for daily survival, nurturance and love.

The same proportion of these young people as of adolescents in school share problems with their friends (Figure 7.4). Differences are more evident when the influence of peers is considered. The street youth were significantly more likely to be swayed by friends to use drugs and do things against their better judgement. Finally, a far higher percentage of the street youth felt they had little in common with other people their age, not a surprising revelation given their unconventional lifestyle.

Figure 7.4
A comparison between street youth and school youth on their relationship with peers



Dangers of alcohol and drug use

The Centers for Disease Control (CDC) found people with AIDS have a history of alcohol or other drug use and many drugs used have been shown to suppress the immune system. The relationship between drug use and AIDS development is striking.

L. Siegel, 1986. p. 271.

The use of recreational drugs and alcohol is related to an increase in the likelihood of unplanned sexual encounters which is in turn associated with a decrease in condom use.

R.J. DiClemente and K.A. Forrest, 1987.

Intravenous drug users comprise the second largest risk group (16%) of the reported cases of AIDS in the U.S., but represent only .4 percent of cases in Canada. ... means of infection with HIV in this group is related to the sharing of needles, syringes and other paraphernalia which has been contaminated by the infected blood of another user. Other factors relevant to the transmission of HIV within this group are the existence of "shooting galleries" which promote the sharing of equipment, various sociocultural problems which may interfere with adoption of risk-reduction behaviours, and the degree of access to sterile, disposable equipment.

Royal Society of Canada, 1988, p. 18.

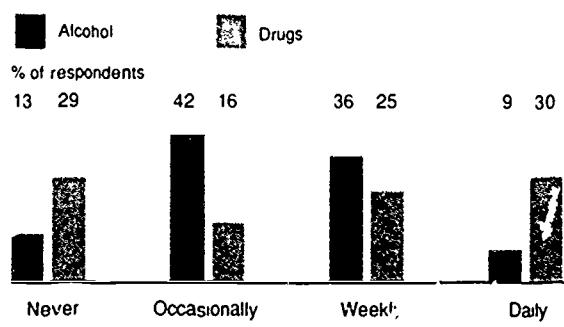
D. Taking risks

1. Alcohol and drug use

Street youth heavily abuse alcohol and drugs - behaviour which compromises their well-being by weakening their immune systems and impairing their ability to make responsible decisions about using protective measures while engaging in sexual activity.

About one-half of the youth surveyed supported weekly or daily drug or alcohol habits whereas less than one-third abstained from drug use and even fewer from drinking (Figure 7.5).

Figure 7.5
Frequency of substance use by street youth



Alcohol, marijuana and hashish were the most frequently used substances on the street (Table 7.1). Twelve percent of these drug users, of whom almost one-half were prostitutes, injected drugs such as speed and talwin and ritalin (Ts and Rs). Nearly one-half of the adolescent intravenous drug users had shared needles with others.

Table 7.1
Frequency of and type of substance use %

Substance	Never	Special Occasion	Once/ month	2-3/ month	Once/ week	2-3/ week	Daily
Alcohol	12	19	11	14	14	22	9
Marijuana/ hashish	29	12	5	5	8	18	24
Cocaine	68	19	2	1	1	3	4
Acid	56	20	8	5	3	4	3
Heroin	96	3	1	-	-	-	1
Speed	87	8	1	2	1	1	1
Valium	86	6	2	2	1	1	1
Solvent sniffing	92	4	1	1	1	1	2
Pain killers	87	5	1	2	1	1	2

Sharing needles

Yes, I share with friends. We don't have it [AIDS]. I don't share with anybody else - I've borrowed but cleaned it with alcohol first.

Male, 16-year-old, Alcohol and drug abuser.

Ya, I seen it [sharing] at a party - they shared a needle and cleaned it only after all had done it.

Male, 17-year-old, Homeless.

Friends share - maybe because they're married couples and they trust each other.

Male, 17-year-old, Prostitute.

My friends share because they can't get their hands on fresh needles. Some go in and steal from their doctors.

Female, 18-year-old, Alcohol and drug abuser.

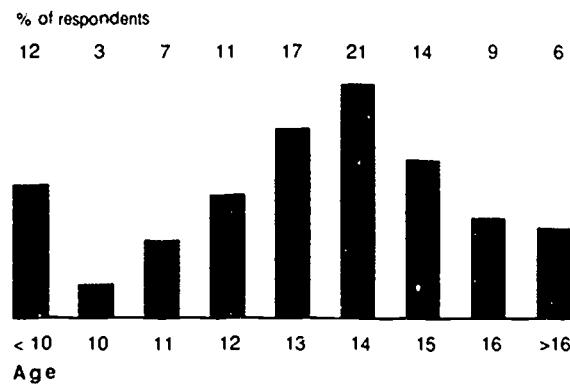
They [friends] share - they don't always have clean ones but they put it in bleach.

Female, 15-year-old, Homeless.

I always use my own needles. I get them on the street, you can buy them anywhere if you know the right people. You can catch AIDS or hepatitis; its just a street risk - you don't do it.

Male, 18-year-old, Homeless.

Figure 7.6
Age of street youth at first sexual intercourse



Sexuality

It's trendy here to sleep around.

Female, 18-year-old, Homeless.

I've thought about being gay - having sex with other girls. Everybody down here practically is bisexual, it's like trendy for guys to be gay.

Female, 17-year-old, Homeless.

I think that everyone has a bisexual tendency at some time whether they admit it or not. I was in love with a guy once; we hugged and we were in love.

Male, 20-year-old, Homeless.

2. Sexual history

Nearly all the street youth (94%) had engaged in sexual intercourse, some at a very early age. One-third of the young people had experienced sexual intercourse before puberty (Figure 7.6). "Curiosity" (41%) was most often cited by males as the reason they initially had sexual intercourse while females indicated "love for the person" (24%), and "rape" (23%) as their predominant reasons.

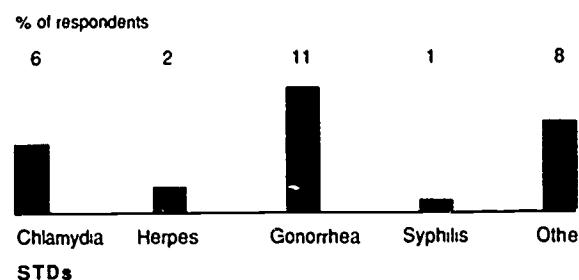
Those that were sexually active were sexually promiscuous. Two-thirds of them had had five or more sexual partners. The average number of lifetime sexual partners for individual adolescents on the street was 21 (excluding prostitutes). Estimates offered by male and female prostitutes were in the 200 range.

The majority of the street youth said they were heterosexual or "straight" in their sexual orientation. Although only a small percentage claimed to be gay (2%) or bisexual (4%), 15 percent of the adolescents, proportionately more males, had had a same-sex partner. This finding may be related to normal adolescent sexual exploration. Another possible explanation is the subculture's encouragement of bisexuality. Twenty-one percent of sexually active street youth had engaged in anal sex; four percent reported having anal sex frequently.

3. Incidence of STDs

Almost one-half of those adolescents who were sexually active had been tested for STDs. The failure of medical practitioners to explain testing procedures to these adolescents was implied by the fact that three percent of the respondents were uncertain as to whether or not they had been tested. Although only seven percent of the youth said they were worried about getting a STD, one-fifth of them had in fact contracted one, most notably gonorrhea and chlamydia (Figure 7.7). Other STDs reported by the youth included trichomoniasis, pelvic inflammatory disease, yeast infection, scabies, and crabs. The majority of young people who had had a diagnosis of a STD obtained (94%) and completed (87%) medication according to instructions which were clear to them (91%). They were not as likely, however, to return for follow-up visits (75%).

Figure 7.7
Street youth who contracted STDs



STD protection

I don't think about STDs.

Female, 16-year-old, Criminal.

I wouldn't care if I got one [STD].

Male, 18-year-old, Alcohol and drug abuser.

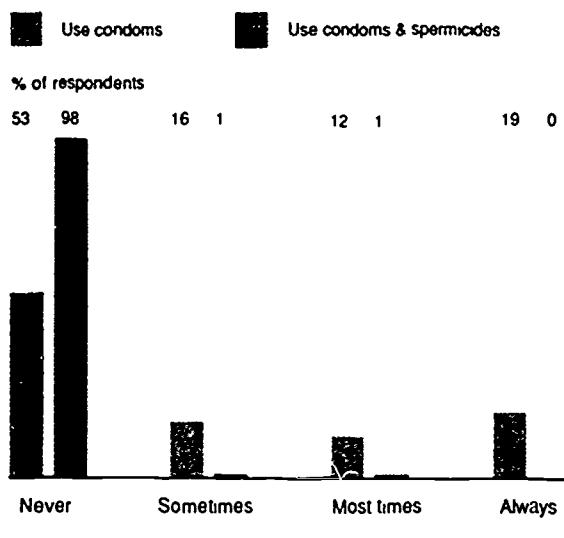
I'm not really worried, I trusted them [partners].

Female, 16-year-old, Homeless.

I only worry after the fact.

Male, 16-year-old, Criminal.

Figure 7.8
Street youth: frequency of condom use for protection from STDs



AIDS protection

I don't give blood anymore. I'm afraid needles aren't clean or I'd find out I had AIDS.

Male, 17-year-old, Alcohol and drug abuser.

You could tell if they have AIDS if they're real skinny and ugly, and you can tell fags.

Male, 17-year-old, Criminal.

I give blood partly to see if I have AIDS.

Female, 16-year-old, Prostitute.

I stay away from faggots or bisexuals. It's easy on streets to tell who's bisexual.

Male, 18-year-old, Criminal.

Keep clean after sex - like shower.

Male, 18-year-old, Criminal.

I do not have anal sex.

Male, 20-year-old, Homeless.

Just pray. I try not to think about it because you just lose the mood.

Male, 17-year-old, Homeless.

I don't hang around with people who might have the virus. Isn't it people with scabs on their faces and don't they lose a lot of weight? I'm really careful.

Male, 17-year-old, Homeless.

4. Protection measures

Almost 70 percent of the youth said they were worried about contracting the AIDS virus. Some youth had become concerned enough to be tested for the virus (18%) while others were uncertain whether they had been tested or not (3%). One-third of all the street youth said they would use condoms to prevent the spread of AIDS. Almost one-half of them said they had at one time protected themselves from STDs by using condoms (Figure 7.8). Still, only one-fifth stated they relied consistently on the protection offered by condoms. As well, one-third of the young people protected themselves from pregnancy by using condoms most of the time or always. Only two percent of the youth had used spermicidal foam or gel most of the time or always to increase the protection given by condoms. In fact, most young people were not familiar with spermicidal products at all.

Generally, these street youth avoided behaviours known to be risky for AIDS transmission. A few of the young people had decided not to participate in anal sex (2%) and not to use intravenous drugs (2%). Others excluded from their friendship groups homosexuals and prostitutes, because they have been blamed by society for the rampant and alarming spread of AIDS.

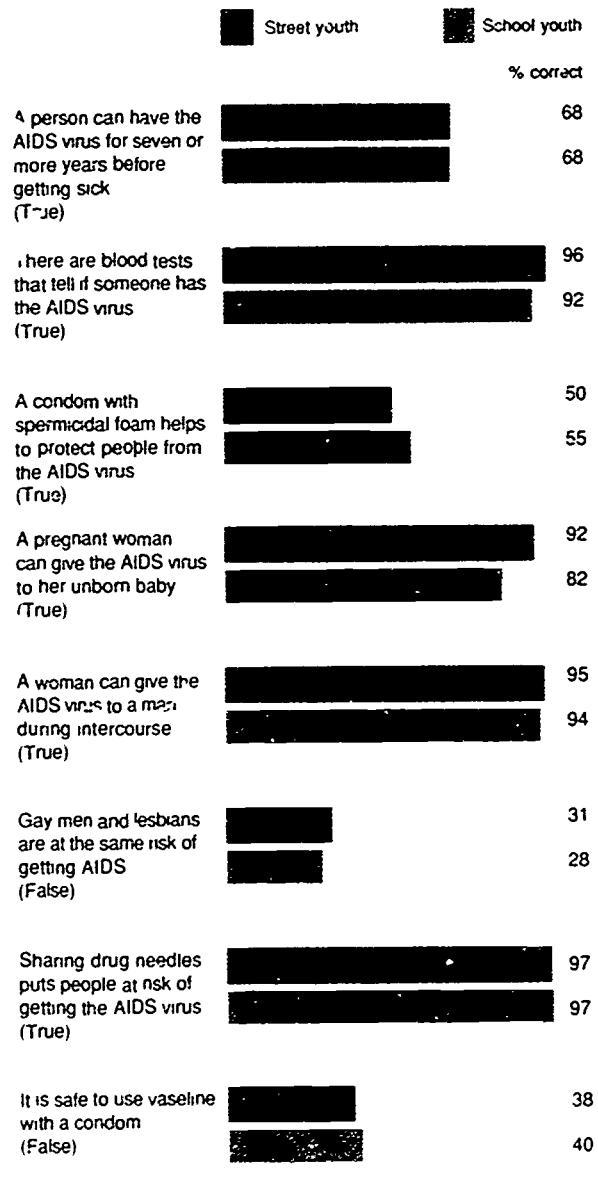
E. Knowledge and information sources

1. What they know and where they learn about AIDS and STDs

In developing the street youth interview, we selected, from the Grade 11 and college/university questionnaires, 15 items to show knowledge of AIDS and seven to indicate knowledge of other STDs. Figures 7.9 and 7.10 show selected items that either represent respondents' understanding of important concepts or demonstrate a clear contrast in the knowledge of the street and school youth.

Street youth in comparison to school youth were slightly more knowledgeable about AIDS (Figure 7.9). Four-fifths of the street youth correctly answered seven of ten knowledge items in contrast to three-quarters of school youth.

Figure 7.9
AIDS knowledge of street youth and school youth



Misinformation

A condom does protect ya' but foam [spermicidal] wouldn't do nothing but keep you from getting pregnant.
Female, 16-year-old, Alcohol and drug abuser.

My girlfriend had gonorhea on her ankle [actually gangrene]. My mom said she would lose her foot if she didn't have it looked after.

Male, 18-year-old, Alcohol and drug abuser.

If a person had AIDS and vaseline stayed inside 'there' [the vaginal] there would be more chance of catching AIDS. Better to use sterilized gels.

Male, 17-year-old, Unemployed.

Gay men are more at risk but I don't know why. Is it because they do 'it' [intercourse] in a dirty area?

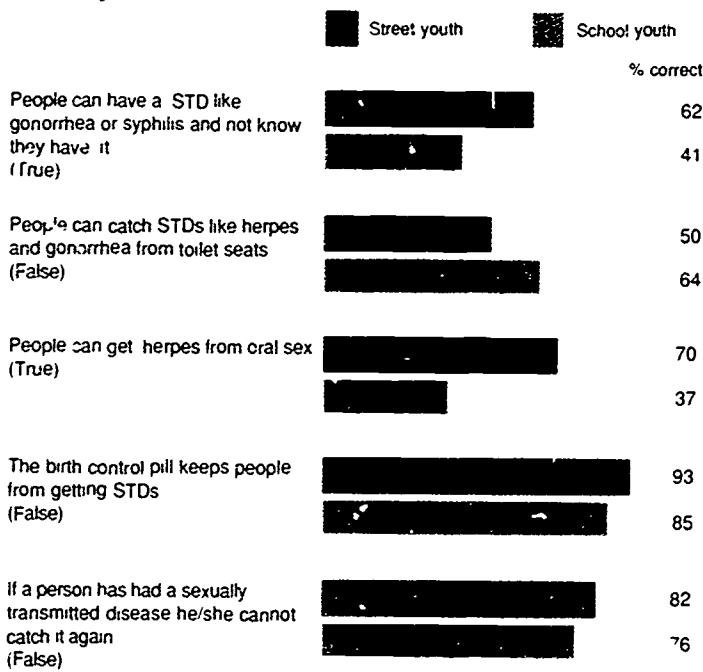
Male, 18-year-old, Unemployed.

I don't know why you shouldn't use vaseline with a condom. I guess it would slip off.

Female, 18-year-old, Unemployed.

As Figure 7.10 shows neither adolescent group demonstrated a good knowledge of other STDs although the street youth appear to have received more information about STDs than their in-school peers.

Figure 7.10
STD knowledge of street youth and school youth



Fewer of the street youth agreed that they needed to know more about AIDS (77% compared to 89% of school youth). Street youth (44%) were more likely than school youth (29%) to report feeling confused by popular media messages, and were inclined to believe that the media exaggerated the seriousness of AIDS.

Street kids are confused

Actually, it's hard to know [what the risks are] 'cause you've got a bunch of people saying use condoms another group saying don't have sex at all and another group saying do whatever you want. If you listen to the stuff on television it's so confusing.

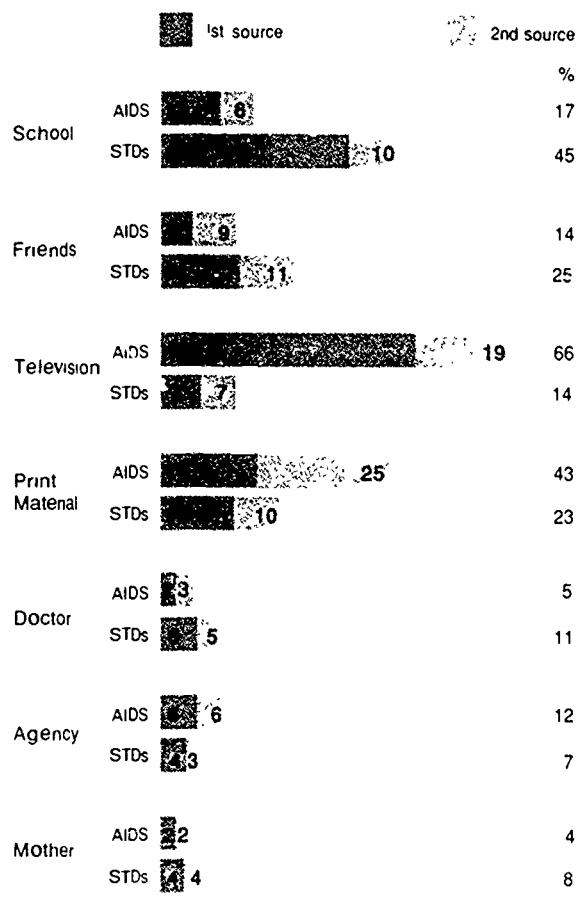
Male, 19-year-old, Homeless.

Really it's not exaggerated [on AIDS], because they're trying to make people aware they need to exaggerate a bit, don't they?
Female, 18-year-old, Unemployed.

I can get six articles [on AIDS] daily out of a newspaper and I'm finding a lot of contradictions.

Male, 17-year-old, Homeless.

Figure 7.11
Street youth: main sources of information about AIDS and other STDs



Reducing risk-taking behaviours

Such information [the rationale for why a particular practice is risky] is likely to increase compliance by helping the reader to understand why he is being asked to relinquish a valued behavior. By presenting the underlying logic for a recommended change in behavior the reader may more readily be persuaded of its potential efficacy.... The behaviors risk group members are being asked to give up are part of a highly valued lifestyle.

K. Siegel, P. Grodsky, and A. Herman, 1986, pp. 241-243.

Education designed to provide accurate information to potentially at-risk people is viewed as the most effective means of reducing the spread of HIV infection. ...group pressure and credible sources of information are critical in influencing behaviour.

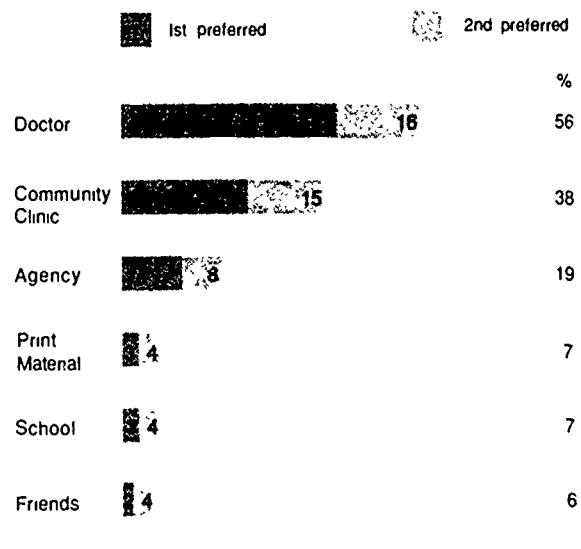
D. Nelkin, 1987, pp. 981-985.

A surprising proportion of street youth (66%) had obtained their AIDS information through television (Figure 7.11). Print material which included pamphlets, newspapers, books and magazine articles was an important source of information about both AIDS and other STDs for these street youth. Although schools had taught almost half of them most of what they knew about other STDs, many claimed they were not well informed and the topic had been only vaguely mentioned to them in school. Many acquired their knowledge of STDs when a friend was exposed to one of these diseases.

Many street youth lacked up-to-date information about AIDS and other STD information. Street youth did not believe spermicidal foam (with nonoxynol-9 which can kill the AIDS virus) would help protect them from the disease. They also questioned the fact that the AIDS virus may lie dormant for seven or more years. These young people showed resistance to new messages that conflict with previously learned information, a reaction that should be taken into account in education initiatives.

Finally, it was apparent that some of the street youth did not understand the rationale for certain safer-sex guidelines. Some, for example, did not believe that anal intercourse is mainly responsible for the rapid spread of AIDS in the male homosexual community. Of those who did identify anal intercourse as a primary means of acquiring HIV infection, many believed the virus was transmitted in this way because the anus is a "dirty area."

Figure 7.12
Street youth: preferred sources of information about AIDS and other STDs



2. Preferred and least preferred sources of information

Respondents were asked where they would like to get information about AIDS or other STDs. We learned that doctors had actually provided some of these street youth with information about AIDS (5%) and STDs (11%), and that a large proportion of them (56%) preferred to obtain this type of information from doctors. Community clinic staff were a secondary preferred source of information (Figure 7.12). Agencies were also mentioned as a comfortable place to receive information provided the youth workers could be trusted to respect the privacy of those who confided in them.

Where they would go for information

I would like to go to talk to experts like researchers who are trying to find a cure.

Female, 16-year-old, Unemployed.

It would be nice to have government vans where they would have an AIDS information van that could provide past and present information. What's changing is critical. It would be nice if someone came down and spoke to us [street kids] and gave us things [reading material and protection].

Male, 17-year-old, Homeless.

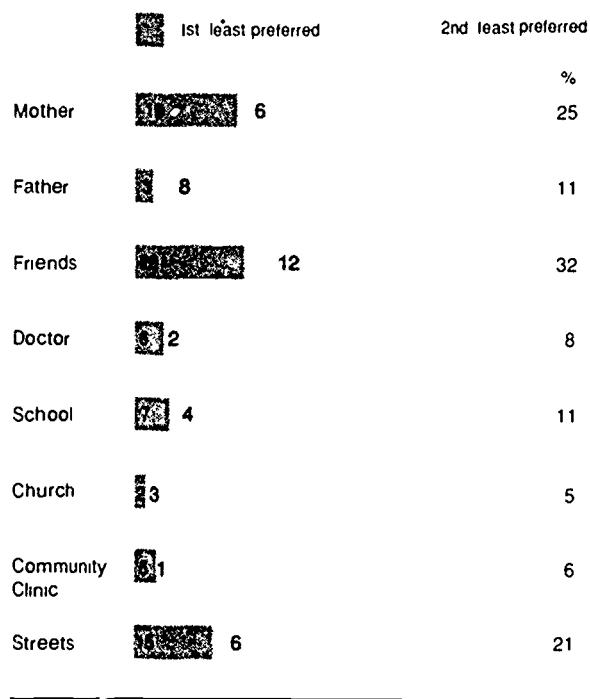
I think that they should have a place even if it's a small library or something like that, with information and people to talk to. 'Cause I know young kids are afraid to go to their parents, doctor or even a clinic.

Female, 19-year-old, Unemployed.

I think it would be interesting if an envelope were sent around to houses. If it came to the door it would be read. That way people who are too embarrassed to go to their family doctor or whoever could get information. When I go into the doctor's office there's plenty of things set up but if you start looking through things you get the feeling people are looking at you - thinking, why do you want to know that?

Female, 19-year-old, Unemployed.

Figure 7.13
Street youth: least preferred sources for information about AIDS and other STDs



Their acceptance of particular information sources was closely related to the issue of confidentiality. They were uneasy about the possibility of having their personal lives disclosed, most of all to friends and family (Figure 7.13). Also, they considered it unwise to seek information from friends or "on the street" because they feared gossip about their health and they did not see these sources as well informed. Parents were generally not regarded as a good source of information about AIDS or STDs because they were not perceived as being comfortable with their children's sexuality.

Where they would not go for information

Government agencies. I'd wonder about anything to do with social services. Anywhere they're taking down information about your personal life and stuffing it into a computer - or any sort of bureaucracy where you're not talking to people, just filling out forms.

Male, 20-year-old, Homeless.

My family doctor. A while back when I first came home my mom made me go to the doctor, she [doctor] phoned my mom instead of me and told her the results, it really wasn't any of my mom's business.

Female, 16-year-old, Homeless.

People on the street - they wouldn't know about it or have the right information.

Female, 17-year-old, Homeless.

She [mother] thinks you should save it [virginity] till you're married, she doesn't understand or even listen.

Female, 19-year-old, Unemployed.

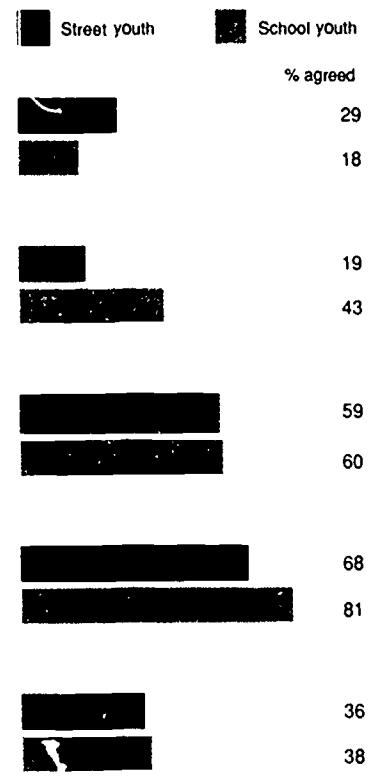
Health clinics or anywhere that provides a specific service is a problem. Any structured system that's there for one purpose would mean that everyone knows why you're there.

Male, 17-year-old, Homeless.

I'm not comfortable around my parents at any given time plus the fact that I know my parents aren't really comfortable talking about stuff and I wouldn't get any straight answers.

Male, 15-year-old, Homeless.

Figure 7.14
Attitudes of street youth and school youth
toward sexual intercourse and condoms



F. Attitudes toward sexual activity and condom use

1. Communicating about sex and condoms

We compared the attitudes of the street youth toward sexuality and condom use with those of 16-to-19-year-old adolescents still in school (Figure 7.14). Although the percentages were low in both groups, more of the street youth, who tend to be more sexually active, reported that they trusted their sexual partners to tell the truth about past sexual experiences. A similar majority of adolescents in both groups agreed that they would broach the subject of past sexual experiences with their partners. The street youth were much more hesitant about talking to partners about using a condom even though they were less embarrassed about buying condoms. A little more than one-third of each group agreed that condoms interfere with sexual pleasure.

Talk with partners about condoms

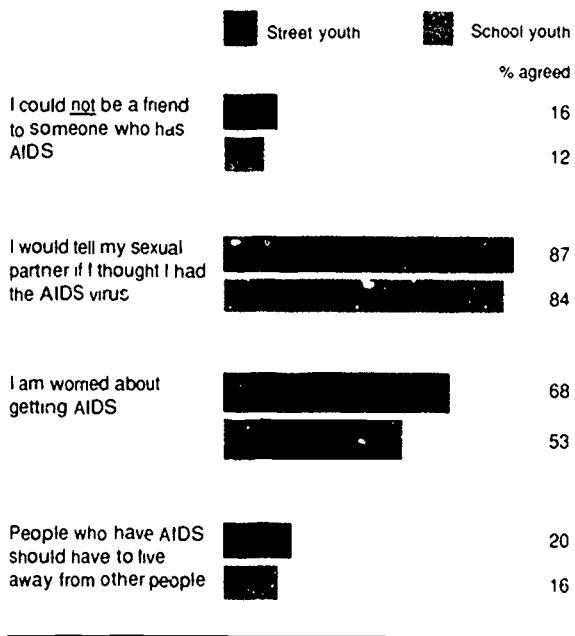
If I say something to him he'll think I think he's dirty.
 Female, 17-year-old, Homeless.

The guy is the one who decides to use a condom - I never ask them to.
 Female, 17-year-old, Homeless.

Most of the time it's girls want me to use a condom, but if I can I don't use it - I don't think too much about getting a dose. Maybe I should, but when I get horny I just want to go.
 Male, 15-year-old, Criminal.

If they brought it up I'd say "ya" to using it [condom], but I wouldn't ask them to.
 Female, 17-year-old, Unemployed.

Figure 7.15
Attitudes of street youth and school youth
toward people with AIDS



Attitudes toward persons with AIDS

I don't care about it. Attitudes with my friends is that it's a faggot's disease.

Male, 16-year-old, Homeless.

It's reality; they know before they turn gay they're going to get it.

Male, 17-year-old, Homeless.

Before I felt no remorse for people who had it [AIDS], but now that I have friends who have it, it turned me right around.

Male, 18-year-old, Prostitute.

2. Homosexuality and people with AIDS

The attitudes of street and school youth toward homosexuality and persons with AIDS were compared. Two-fifths of the street youth said they believed homosexuality to be acceptable today while less than one-quarter of the young people still in school did. Nevertheless, the same proportions of the street youth and the youth attending school, when asked to express their own convictions, agreed that homosexuality is wrong (41%). Over one-half of both groups of adolescents expressed worry about getting AIDS (Figure 7.15). The street youth, however, were more fearful perhaps because they perceive that their lifestyle does present a greater risk for infection. Their fear of AIDS translated into a slightly greater fear of persons with AIDS: almost one-fifth of the street youth were uncomfortable with the thought of having people with AIDS around them, either as friends or simply living near them. Most adolescents in both groups agreed that they would tell their sexual partners if they thought they had the AIDS virus.

G. Summary

Street youth worry about AIDS and have responded to their anxiety by learning a great deal about the disease and related risks. Some of the more conscientious street youth have incorporated safer-sex knowledge into their lives. Unfortunately, because of negative life circumstances and peer pressure, the majority of these adolescents are still influenced to use drugs and be sexually promiscuous.

Although they understand the benefits of using condoms their behaviours did not reflect their knowledge. The high incidence of STDs among these youth is a good indicator of their vulnerability to and lack of caution regarding diseases that are sexually transmitted. Part of their AIDS defense strategy is to blame and exclude homosexuals and prostitutes because their behaviour puts them at risk to contract and transmit the HIV.

It will be difficult to persuade street youth to abandon behaviour that helps them cope and survive in their adverse environment. Health professionals may be in a unique position to educate these adolescents. Doctors, in particular, are highly regarded by these youth and are often approached for help.

VIII Summary, implications and recommendations

A. Introduction

This study was designed to find out what Canadian young people know about AIDS and other STDs and to determine how they have responded to this knowledge. The targeted population was youth aged 12, 14, 16, 18 and 19; to correspond to these ages, Grades 7, 9 and 11, and first year college and university students (Secondary 1, 3 and 5, second year CEGEP and first year university students in Quebec) as well as secondary school dropouts and street youth were surveyed. Before we discuss the findings, we consider how the study was received and whether survey respondents actually represented young people across Canada.

There was virtually universal support for the study among the respondents interviewed and surveyed. They believed the study was very important and, with anonymity assured, were willing to share intimate details of their lives with our research team. The study was not supported by every education official approached and some parents were not prepared to approve their child's participation. These adults were concerned about the specificity and focus of some survey questions. The main concerns were that asking questions such as those about sexual orientation and suicide would bring into focus some respondents' attitudes with harmful consequences for them, and that the study could be interpreted as promoting sexual activity. The study was conducted in a very politicized atmosphere in which some school jurisdiction officials viewed the AIDS epidemic as an opportunity to preach abstinence to young people and others feared the public scrutiny a consideration of sexual issues might bring. In spite of the fact that some educational jurisdictions contacted did not fully support the study, a representative sample of young Canadians participated.

The following summary of findings is organized according to the themes used in the body of the report itself. First, we note what young people know about AIDS, then where they learned it, and how they view various sources of information. Third, we describe their sexual behaviours and the factors that influence them in their sexual relationships. The findings regarding the attitudes of Canadian youth toward sexual issues are noted in the fourth section. In the fifth section we focus on those young people who are most at risk of contracting AIDS and other STDs.

Offering definitive plans for program interventions is beyond the scope of the report. Rather we present some fundamental principles related to educational interventions along with our recommendations to those planning and implementing programs.

B. Knowledge of AIDS and other STDs

Generally speaking, young Canadians can accurately define AIDS and they know how the human immunodeficiency virus (HIV) is transmitted. They are not as well-informed about how to prevent HIV infection. They are substantially less knowledgeable about other STDs. The AIDS epidemic has created what might be called a general anxiety among young people. They are confused by the information available and they have become uneasy about AIDS; but, their anxiety does not seem to have motivated them to modify behaviour that puts them at risk. They do recognize their need for additional information that is clear, frank, accurate and unbiased.

More specifically, Canadian youth know that HIV is transmitted from one person to another through sharing drug-injection needles and through sexual intercourse. However, a substantial proportion of them do not know about using condoms and spermicides to protect themselves against HIV infection. They know even less about how to protect themselves from other STDs. Their level of knowledge has apparently led more than half of them to believe that they can keep themselves from getting AIDS. Most of them also believe that their chances of contracting another STD are low. This explains in part their willingness to engage in unprotected sexual intercourse. Because most do not believe their own sexual behaviours could put them at risk of contracting a STD, they do not seriously contemplate either abstinence from sexual intercourse or protecting themselves or their partners, even most of the time, when having sexual intercourse.

Although they report little peer pressure to engage in sexual intercourse, adolescents generally accept premarital sexual intercourse, and about one-half of young people 16 years of age and three-quarters of older adolescents have had sexual intercourse. Of those who have sexual intercourse often, only one-quarter protect themselves or their partners at least most of the time by making use of a condom and/or spermicide.

C. Sources of information

Television and print material (newspapers, pamphlets, magazines, and books/journals) have played the major role in disseminating information about AIDS to young people. In contrast, schools and print material are perceived as the most prominent source of information about other STDs. A substantial number of respondents from all age groups indicated each of the following as a main source of information about AIDS, other STDs, sex, and birth control: television, print material, school, family members (mainly mother) and friends.

Young people do not regard all sources of information as equally trustworthy. They suspect the media of capitalizing on issues like AIDS to sell their products. They think friends are often unreliable and they believe parents do not know enough about AIDS to advise them. Government-produced material is viewed as watered-down so that it will not offend vociferous lobby groups. Schools and doctors, on the other hand, are accepted as reliable sources of information. Young people expressed a strong preference to learn about AIDS and other STDs from medical sources. Few doctors, however, are talking to young people about AIDS and other STDs even during office visits, and schools have been reluctant to provide young people with specific information about sexuality and STDs. Churches are rarely mentioned as sources of information about any of these related topics. Respondents who cited television and friends as main sources of information tended to have lower knowledge scores than respondents who cited school as their main source of information.

Although youth are receiving their information about sexuality, AIDS and other STDs from several sources, few sources are committed to helping them receive complete and truthful knowledge, develop compassionate and tolerant attitudes toward the infected and ill, or consider a range of sexual options (many advise only abstinence) which protect them from contracting and transmitting infections. If the status quo is maintained, these sources of information are not likely to provide Canadian youth with knowledge that will influence attitudes and motivate change in behaviours.

D. Behaviour

In the absence of a vaccine to prevent HIV infection or a therapy for the cure of AIDS, educating people about behaviours that can result in HIV transmission and actions they can take to protect themselves from becoming infected is essential. Sexually transmitted diseases, including AIDS, are transmitted almost exclusively by behaviours that can be avoided or modified. The ability to make decisions to avoid or modify harmful behaviours is based, in part, on acquiring relevant knowledge about the diseases themselves, about how infection is transmitted from one person to another, and about specific actions that put one at risk for exposure versus those actions that are safer. Armed with this knowledge young people should be able to develop the competence to avoid potentially dangerous behaviours altogether or take practical steps to reduce the risk of becoming infected while engaging in such behaviours.

If the knowledge is to influence their decision-making and subsequent behaviour effectively, individuals must learn to believe that it is their own behaviour, and not that of others, that puts them at risk of contracting AIDS and other STDs. They must be convinced that not only can they reduce or eliminate the risk of infection by avoiding or modifying certain personal behaviour, but also that they can continue to enjoy themselves if they do not take risks. Finally, if a modified behaviour is to become firmly integrated into their lifestyle, they must believe that it is accepted by their peers. Therefore, key questions must be: Do Canadian youth have appropriate levels of knowledge and the necessary beliefs to make decisions leading to informed and responsible behaviours? and, Do young Canadians behave in ways that would prohibit the spread of HIV infection?

There is a significant proportion of injection-drug users among the young people at great risk of acquiring AIDS (12% of street youth and 5% of dropouts). In addition, we found that the vast majority of older adolescents had engaged in sexual intercourse, many with more than one partner, and more often than not without benefit of the protection provided by condoms and spermicide. Moreover, a significant percentage of these older adolescents (almost one-fifth) have engaged in anal sexual intercourse on at least one occasion. In general, it appears that young people's knowledge of AIDS and other STDs has not been sufficient to deter many of them from taking risks while engaging in sexual activities. One possible explanation is that AIDS has not touched them at a sufficiently personal level and that they view AIDS and other STDs as infections that happen to other people. It is also possible that information available to them about AIDS has been too confusing to influence their beliefs or convince them to change their behaviours. Most likely both these facts explain, in part, why young people continue to risk sexually transmitted infection.

Regardless of the reasons why many youth have decided to be sexually active, an alarming number of those who are engage in behaviour through which infections can be transmitted. If AIDS gains a foothold among Canadian adolescents, the vehicle that will drive its spread is already in motion.

E. Attitudes

Young people's attitudes predispose them to behave consistently in similar situations. Consequently, it is important to identify the attitudes of youth toward homosexuals, people with AIDS or HIV infection, and toward having sexual intercourse and using condoms for protection. By gaining greater understanding of their attitudes, one can move closer to becoming aware of the behaviours in which youth may engage. Behavioural change is a major goal of AIDS and STD education, and it is essential that it include opportunities for young people to develop positive attitudes which predispose them to safer, health-promoting behaviours.

It is clear that the AIDS epidemic has focussed negative feelings, especially those of young male Canadians, toward homosexuals. For many young people, AIDS is a homosexual disease: their feelings about people with AIDS or HIV infection are virtually the same as their feelings about homosexuals. Ostracizing homosexuals and people with AIDS may be a defence mechanism at an emotional level, but it is not an effective stance for personal protection. Those who react this way tend to think that only others are at risk to contract AIDS. Such thinking gives a false impression of who is and is not free of HIV. Furthermore, public expressions of reproach or scorn drive underground those most in need of education and counselling.

Medical opinion suggests that homosexuality is not a matter of choice, nor are young people lured into homosexuality through proselytizing. It is important for Canadians to have a greater understanding of people with this sexual orientation, to avoid discriminating against homosexual people, and to know how HIV is transmitted. Behaviour may place one at risk; simply belonging to a group does not.

People do not choose to become infected with HIV nor do they choose to develop AIDS. They are, however, severely traumatized by their infection or illness, and, many are discriminated against and neglected. A considerable proportion of young people told us they have negative feelings toward people with HIV and AIDS. These people need compassionate treatment and care. Education should foster in young people a spirit of understanding and compassion for HIV-infected people and people with AIDS, and educators should teach youth to protect the human rights and dignity of both infected and terminally-ill people.

We found that the majority of older adolescents accept the fact that their peers are sexually active. Only a small minority of those surveyed, most of whom were females, frowned upon premarital sex between two people in a loving relationship. There were, interestingly, some differences in the sexual values of older adolescents depending on how they viewed the quality of their relationships with peers and parents. Being sexually active appears to be positively related to popularity with peers, while chastity is associated with a positive relationship with parents.

We found that older adolescents who have not had sexual intercourse, compared with those who are sexually active, tend to have lower self-esteem and poorer mental health. These findings have direct implications, not only for parent/youth relationships and communication about sexuality, but for education about sexuality in general. Because sexual activity is valued by most older adolescents, preaching abstinence will probably be less effective than encouraging informed and responsible sexual behaviours.

There is a strong negative attitude toward condoms by both young people who have and have not had sexual intercourse. In fact, those with the most sexual experience are least enthusiastic about condoms. Only 14 percent of the college/university sample indicated they "always" use a condom. Because this is the most effective protective measure against infection which can be used during sexual intercourse, it makes sense to encourage the development of a more favourable attitude toward the use of condoms. This difficult task - which must to some degree eroticize "safer sex" while making condom use socially acceptable - must be shared by educators, parents and counsellors as well as advertisers.

F. High-risk youth

Street youth as a group are most likely to contract and spread AIDS and other STDs because they take more risks with respect to sexual activity and many regularly share drug-injection needles. Their anti-authoritarian attitudes make street youth especially difficult to reach with relevant and timely messages. They know what AIDS is and how it and other STDs spread. The preventive strategies some employ, however - for example, many exclude homosexuals from their immediate social group, and some prostitutes use condoms when they are with clients but not when they are with lovers - do not effectively prevent them from sexually transmitted infections. They often disregard their own knowledge and do not use protective measures when they are with those in their own peer group. If some in this population become infected with HIV, and anecdotal evidence indicates that a few already have, its spread will be extremely difficult to control because of the life circumstances of street youth.

There are concrete realities in the lives of street youth which work against their inclinations to take protective measures. Young people living on the street do not have money to buy condoms. Also, needle sharing is a functional part of a subculture of drug users. The availability of syringes is not the only problem; sharing needles is part of a ritual that acts to maintain group solidarity.

Dropouts, many of whom work, have an income and are sexually active, demonstrate high-risk behaviours as well. They drink, smoke and use drugs more frequently than teenagers in school. They are beyond the influence of school-based programs and most, having achieved a certain level of independence, will not respond to many types of community-based programs. Their sphere of influence extends well beyond their own group, often to a younger population, and this influence may have a detrimental effect on programs for school-based youth. For these reasons the importance of reaching school dropouts cannot be underestimated.

Within schools there are also deviant groups of young people with anti-establishment attitudes whose behaviours may put them at risk. Many of them use illicit drugs and have many sexual partners.

G. Implications for AIDS education

Eleven principles underlie our recommendations to those whose responsibility it is to educate young people in Canada about AIDS and other STDs.

- 1) The AIDS epidemic is a serious threat to Canadian youth.
- 2) The transmission of HIV can be largely prevented by the adoption of informed and responsible behaviours.
- 3) Accurate and complete information is the basis for informed and responsible decisions about personal health behaviour.
- 4) All people, including youth, have the right to all available information about AIDS. Government leaders, health professionals and health educators in every Canadian province, territory and community have a responsibility to ensure that the people they serve receive accurate, timely, effective, and continuing education about AIDS.
- 5) Educational programs should link AIDS with other STDs, the transmission of which can be prevented by the same precautions that prevent the acquisition of HIV.
- 6) Information should be provided to youth by credible sources, in language that is clear and straightforward, and in an atmosphere that is non-threatening.
- 7) Educational programs should give young people specific factual information about AIDS, develop social skills such as responsible decision-making and assertiveness and promote tolerance and compassion. The goal is to help Canadian youth initiate and maintain responsible, infection-avoiding behaviours. Fear, uncertainty because of mixed messages, and discriminatory attitudes will undermine and render ineffective even the best educational programs.
- 8) Priority should be given to educating those groups and individuals at greatest risk for HIV infection (as a result of their behaviours and/or geographic location). These are school-age youth who are not attending school, including 'street youth' concentrated in large cities.
- 9) AIDS education will be most effective when presented in the context of a broad, well-established program that recognizes the relationship between personal behaviours and health.
- 10) Many adolescents are and will continue to be sexually active; consequently, an educational approach that provides young people with responsible behavioural options is likely to be more effective in preventing the spread of HIV than one which preaches abstinence from sexual intercourse.
- 11) All educational interventions should be evaluated through pilot testing before they are implemented.

Our recommendations relate to the role of the federal government, the provincial and territorial governments, parents and peers, health services within colleges and universities and the need for research.

1. The role of the Government of Canada

We recommend that the federal government provide clear, frank, and complete information about the AIDS epidemic in Canada. They should acknowledge that young people are an important target group to whom information needs to be directed and that young people are and likely will continue to be sexually active. Ongoing, up-to-date, comprehensive documentation of sources of information, and information about prevention and treatment of AIDS and other STDs should be provided to out-of-school youth, to in-school youth and to the general public. This can be done through systematic media releases and frank, accurate information pamphlets. The Federal Centre for AIDS (FCA) has already begun producing and promoting this type of information and their efforts should be supported. Medical authorities should be encouraged to interpret, for the public, information available about the current status of AIDS. The FCA can play a major role in coordinating the efforts of health-care professionals who assume this responsibility. Regular status reports can counter the media's tendency to sensationalize AIDS-related issues, and help those developing educational programs within the provinces and territories.

A number of programs and services have been designed to reach youth at risk of contracting AIDS. These range from information services to campaigns to provide young people with free condoms and needles. Canadian youth in the greatest danger, those living on the street, for example, are very difficult to reach. Therefore, we suggest that the federal government initiate such programs immediately in several communities and carefully evaluate their success. Several evaluation models, developed for similar programs around the world, are available.

2. Provincial/territorial educational programs

Accurate information should be made available to young people just prior to and throughout their adolescent years. This is best accomplished in structured courses in classroom settings. These courses must be explicit. Obscuring details about activities that can result in the transmission of HIV confuses youth about the seriousness of the risks and about how to avoid them. We acknowledge that education about the sexual transmission of HIV and about ways to prevent such transmission is controversial in particular settings. Where this is the case it would be wise to involve parents and community leaders in the planning of school-based AIDS education programs. In fact, we strongly recommend that the schools also take on the task of ensuring that parents are informed about AIDS.

Programs already in place in some Canadian provinces are appropriate models for new and better programs. Current programs tend to over-emphasize the biomedical and immunological aspects of HIV infection and AIDS and the avoidance of infection through abstaining from sexual intercourse; they tend to under-emphasize or omit specific information about potentially harmful behaviours and effective protection from HIV infection. Thus far AIDS education for Canadian students has tended to be euphemistic and vague, lacking the clarity, frankness, and completeness both desired and needed by young people.

3. Parents and peers

Governments in recent years have given considerable weight to the role parents play in influencing their children to behave responsibly. Our research indicates that young people who have positive relationships with their parents do not risk damaging their health as frequently as those who have troubled or difficult relationships with their parents. Certainly, many young people in this study would prefer to receive sex-related information from their parents. We concur with the government position that family members are extremely important role models and sources of information on these matters. To make a difference, however, parents need up-to-date and accurate continuing education about AIDS and other STDs. We learned that most young people believe their parents' present level of knowledge about AIDS is inadequate. Such information can come directly to parents from federal government programs, from such initiatives as the regular status report mentioned above, and from the schools.

Most young people become sexually active for romantic reasons and they value the spontaneity that characterizes their sexual experiences. In effect, what we are suggesting they do is to anticipate and plan their sexual encounters. It will be a difficult challenge to win them over to the concept of planned, responsible sexual behaviours. Educational programs must present to them information on the risks they take and explain that avoiding risks depends on their being responsible for themselves and their sexual partners. Expectations have to be changed so that relationships between young men and women are increasingly based on the perception of risk on the one hand, and feelings of responsibility for one's self and one's partner on the other. This objective should be strived for in educational programs, even though it is problematic whether emotionally charged relationships can be reduced to decision-making exercises.

4. College and university health services

Free health clinics on college and university campuses provide an excellent opportunity to make available counselling and education about the risk of infection associated with unprotected vaginal, anal and oral intercourse. In order to aid them in designing educational campaigns, campus health services across the country should be made aware of our findings with regard to the sexual behaviours of college and university students.

5. Research

In order to ensure that the more important issues are being examined through research, we suggest that the federal government take an active role in determining research priorities. Traditionally, there has been a tendency for government to allow researchers to define problems for investigation instead of itself identifying specific research needs, outlining research designs and inviting qualified researchers to conduct studies. Researchers could continue to submit unsolicited proposals, but they also should be contracted to conduct research that will guarantee a comprehensive response to the AIDS epidemic. Although our recommendations relate primarily to education-related research, we believe research to indicate the prevalence of HIV seropositivity in the Canadian population should also be conducted so that more accurate estimates of risk can be made. Survey research is needed periodically to assess what youth know, believe and do about HIV infection and AIDS. Behavioural research is needed to understand why they take risks. And, evaluation research is needed to assess the effectiveness of AIDS education programs, interventions and media campaigns.

H. Concluding comment

The dilemma for educators and health promoters that is made clear in this study is that in spite of young Canadians' knowledge about AIDS they continue to act in ways that could put them at risk. The explanation for this seems to lie in part with the willingness of adolescents to engage in a variety of risk-taking behaviours, such as fad dieting, drinking and driving, and misusing drugs. Probably of greater importance is that young people believe there is a low probability of them being infected by HIV regardless of their personal behaviours. This belief is reinforced by the near-absence of documented cases of AIDS in their age group, the low number of adult cases in most Canadian provinces and territories, and the low percentage of cases transmitted by heterosexual, non-drug-using Canadians. Young people have not internalized the risk that AIDS poses to their future well-being, a risk that is masked by the undetermined extent of HIV infection among Canadians in general and youth in particular.

It also appears that STD education has been largely ineffective. Youth are distressingly uninformed about the serious consequences of undetected STDs other than AIDS, have unrealistic beliefs about their chances of becoming infected and have not been motivated to avoid or change behaviours that could result in infection.

Because the approach taken thus far to education about AIDS and other STDs has been ineffective, we propose that educational programs with the following components be implemented and evaluated. First, the probability of contracting AIDS must be presented to young people in such a way that they come to regard it as substantial and very real. Second, learning activities must allow youth to meet with people who have AIDS to help them realize that AIDS can affect them. Third, alternative forms of sexual expression that do not involve risk should be discussed. And fourth, these programs must promulgate a set of values and the sustaining interpersonal skills that allow young people to discuss responsible sexual activity in an open manner.

Young Canadians are anxious about AIDS and eager for more information. Now is the time for dynamic education programs to help them develop appropriate attitudes and adopt safer behaviours with respect to AIDS and other STDs, before the risk of infection increases further and these diseases become more prevalent among them.

The study reported in this publication was designed to provide health educators and health professionals with useful information about Canadian adolescents. The text did not provide an explanation of the sampling and statistical analyses procedures nor were all the data presented in tabular or figurative form. This appendix provides a brief technical explanation of the statistical procedures employed in the study. Additional tables and figures as well as a full description of the design of the study can be found in *Canada Youth and AIDS Study: Technical Report*.

1. Sampling

a. Grades 7, 9 and 11 respondents

The study was intended to simulate the development of sexual behaviours and attitudes in Canadian adolescents from puberty to age 19. Grades 7 and 9 were selected because many girls begin puberty at age 12 and many boys enter puberty when they are in Grade 9 (age 14). Grade 11 was selected to maintain the two-year cross-section analyses and explore the early stages of sexual development within the secondary school environment.

To identify the appropriate sample for Grades 7, 9 and 11 we had to meet two criteria. First, the ten provinces and two territories had to be sampled in such a way that separate reports of findings with an adequate level of confidence could be prepared for each. Second, the findings had to be sufficiently representative to provide a national picture. To produce the national results, the findings for each province and territory were weighted in proportion to the number in the targeted age group in each province and territory.

A two-stage cluster sampling procedure was used to sample young people in Grades 7, 9 and 11. The first sampling stage was the school jurisdiction and the second, the school class. The surveys were designed to be administered by teachers in school classes because classes are the easiest units by which to access a large number of youth for data collection in the most controlled manner.

Specifically excluded from the study were (1) classes in private schools, (2) special education or remedial classes and (3) very small schools (except in the territories) where the grade enrolment would not reach twenty students.

Each provincial sample was drawn to produce maximum error limits of ± 5 percent at a 90 percent level of confidence. The weighted provincial and territorial results that comprise the national findings can be viewed, at the minimum, as having the same error limits and level of confidence.

The school jurisdictions were selected systematically, ordered by size and type (separate or public), and the classes were selected randomly. The target in each province was 925 students per level except in Newfoundland (850) and Prince Edward Island (750). Table A.1 shows the actual returns of usable questionnaires by province and territory. The target sample size was obtained for seven provinces at the Grade 7 level, seven at Grade 9 and five at Grade 11. In the Yukon and the Northwest Territories, the aim was to administer the questionnaire to all students in all three grades where the numbers in a class were sufficient to warrant the expense.

Table A.1
Number of Grade 7, 9 and 11
respondents by province/territory

	Grade		
	7	9	11
B.C.	817	708	754
Alta.	1,040	1,102	855
Sask.	1,022	1,140	1,070
Man.	766	740	785
Ont	1,147	1,309	1,297
Que	954	947	855
N B	1,054	1,043	1,125
N.S.	933	933	795
P E I	491	483	775
Nfld	1,020	1,010	1,085
Yukon	238	192	137
N W T.	443	253	84
Totals	9,925	9,860	9,617

b. Post-secondary respondents

A similar two-stage cluster sampling procedure was employed to select the post-secondary sample and provide a national, not provincial analysis; the institution was selected and then the class. The sample was drawn to produce maximum error limits of ± 5 percent at a 90 percent level of confidence.

Rather than draw a national sample and undersample small provinces, the post-secondary institutions were stratified by region, then sampled. Although the procedure results in undersampling the larger provinces, provincial and regional differences were judged to be insufficiently large to require statistical adjustments of the data file.

Table A.2
Number of college/university respondents by province/territory

College/university	
B.C.	647
Alta	364
Sask	1,008
Man	599
Ont.	962
Que	1,340
N.B.	284
N.S.	383
P.E.I.	344
Nfld.	887
Yukon	6
N.W.T.	87
Totals	6,911

Respondents were selected from first year community colleges, first year universities, second year colleges d'enseignements générale et professionnel (CEGEPs) and first year in other public post-secondary institutions (Table A.2).

c. Dropouts

Because youth who leave school would not be represented by the secondary school sample, we planned a survey to contact, by telephone, 1,000 school dropouts (aged 16 to 19). Because of costs, this sample was drawn to provide a national picture only. Where possible, school jurisdictions identified dropouts; interviewees identified others. School lists of dropouts over the past two years were sought from fifty schools. In some provinces and in some single jurisdictions in other provinces, it was necessary to hire individuals at the school board level who called former students or their parents and obtained their consent or permission to be contacted by the interviewer. The interview was based on the questionnaires given the Grade 11 and post-secondary education students. Interviews were actually conducted with 1,033 dropouts.

d. Street youth

At the time of the preparation of this report 656 street youth had been surveyed through face-to-face interviews in ten Canadian centres. Most of these young people were

contacted through social service agencies. Five broad categories of respondents were established and we selected respondents in order to have a proportional representation of these categories. Although we recognized that some respondents could be categorized in more than one way, we identified the following sample of street youth: prostitutes (14%), young offenders (18%), alcohol/drug abusers (13%), homeless youth (39%), and youth in employment programs (16%). The proportion of interviews conducted in each centre is presented in Figure A.1.

Figure A.1
Street youth sample, by centre



2. Sampling bias

There were three possible sources of bias introduced in the study that could have some bearing on the interpretation of findings: refusals, on the part of both individuals and jurisdictions, to participate, non-representative sampling, and under-representative sampling. The bias introduced into the study by subjects who refused to participate falls into three categories (1) demographics: more school jurisdiction areas in large metropolitan centres refused to participate than did jurisdictions in smaller centres, (2) religion: in three provinces a disproportionate number of separate school (Roman Catholic) jurisdictions refused to participate, and (3) parent refusals: we estimate that 23 percent of students from the classes that requested parent consent did not participate. In the provinces where a disproportionate number of large school

jurisdictions refused to participate, comparisons of responses in two provinces based on size of jurisdiction produced non-significant differences. Similarly, in the case of the disproportionately low number of separate schools, we found that the differences between responses from public and separate schools in the province were not significant and, therefore, we did not conduct an adjustment by weight.

The national return rate of 77 percent of the parent consent forms in participating classes was higher than anticipated. We estimate the missing 23 percent to be accounted for by absenteeism, negligence and parents who refused to allow their children to participate. Absenteeism (most likely a maximum of 5%) and negligence to return forms is not likely to introduce bias at the Grades 7 and 9 level. At the Grade 11 level absenteeism is more serious and students who are absent are more likely to be deviant. Analyses of parent refusals conducted during pilot testing indicated no systematic bias associated with the social class or religion of the parents who preferred not to have their children surveyed.

We were unable to identify a sample of college/university students in which males and females and every region were equally represented. Young women were oversampled because there were more females in the programs sampled; we purposely avoided programs such as engineering, technology and nursing, in which males or females were likely to predominate in order to attain more equal gender numbers; however, young women tend to be overrepresented in most other programs. Because the findings are typically presented by gender, this was not a major concern. The absence of representation of young men from the applied sciences, a program comprising mostly males, is a concern. The regional differences – the oversampling of small provinces and undersampling of the larger provinces – might have required some statistical adjustment to the data, but differences were not sufficiently large to make this necessary.

The shortfall of respondents from some provinces has little implication for the interpretation of national findings, but it does influence provincial/territorial comparisons. Because of this we have focussed on provincial differences of 15 or more percentage points.

Over 60 percent of the dropouts identified as part of the sample could not be contacted for the telephone interviews. Although all but a few of the dropouts who were contacted agreed to participate, we cannot be assured that they are not different in some systematic, bias-introducing manner from those who could not be contacted.

3. Development of scales

Over the past six years we have developed a number of scales designed to measure aspects of the lives of adolescents. The scales were formed from a large pool of items related to values, personal characteristics and attitudes. Instruments used in other studies were examined and items which were appropriate to the purpose of this research were used along with items designed specifically for this research. For this study scales were used focussing on self-esteem, mental health, relationship with parents and relationship with peers which were further refined from our previous work. (See *Canada Health Attitudes and Behaviours Survey: 9, 12 and 15 Year Olds: Technical Report*, and *The Adolescent Experience* for more details.) In addition, we developed two scales focussing on attitudes toward homosexuality and people with AIDS or HIV infection.

Likert-type response keys on attitude items were most appropriate to facilitate completing the questionnaires in the shortest period of time. For Grades 9, 11, college/university and dropouts we used a five-choice key: strongly agree, agree, uncertain, disagree, strongly disagree, for Grade 7, a three-choice key: yes, no, do not know.

The scales were refined using factor analysis employing principal components analysis with varimax rotation. For the first four scales, the Scree test had been used to make decisions on the viability of factors by plotting the latent roots. For the purposes of this study, the items were slightly modified, but the basic constructs were the same and Cronbach's alpha provided a useful measure of item consistency. The attitude-toward-homosexuality and attitude toward-people-with-AIDS-and-HIV scales were designed primarily around the constructs employed in the scales, analysis of correlation matrices and the application of Cronbach's alpha.

Table A.3
Reliability of Scales

	7	Grade 9	11	College/university	Dropouts
Self-esteem	..	.72	.74	.77	.70
Mental health	.70	.81	.82	.82	.73
Relationship with parents	.78	.86	.85	.75	.80
Relationship with peers	.57	.71	.73	.70	..
Homophobia77	.79	.72
People with AIDS	.71	.83	.84	.82	.83

We anticipated that there would be a substantial relationship between pairs of items across the first four scales and a decision to include an item in one scale or another was based primarily on the definition of the concept measured. For example, psychological depression as measured by the mental health scale is related to concern about personal appearance as measured by the self-esteem scale. As a result, there is a substantial correlation between the self-esteem and mental health scales. Overall, there are important relationships between the first four scales which provide direction in the development of social interventions. The six scales, although they have much in common, stand as independent concepts. It must be noted that the scales used in the study have a smaller number of items than most scales developed for measurement purposes, and a minimum alpha of .65 indicates sufficient item homogeneity (Table A.3). Although the scales are merely devices to reduce and simplify the amount of information presented, to be useful they must meet minimum test requirements. In order to understand what each scale represents, it is important to keep in mind the concepts from which the items were developed.

4. Development of knowledge items

Pre pilot focus group interviews were held in 12 elementary classes (Grades 6, 7), 27 secondary classes (Grades 9 and 11) and with approximately 100 college and 125 university students to determine the range of knowledge of AIDS in each of the targeted age groups, the appropriateness of the subject matter and the language used for each age group. The focus groups session with a class consisted of two stages: first a short questionnaire was administered to all students followed by a discussion of AIDS-related issues. Second, up to four small groups of five to six students

were interviewed separately to obtain more in-depth information about their views and concerns. Although Grade 6 was originally included in the focus group stage, it was decided that most young students in Grade 6 were pre-pubescent and that Grade 7 students would be more appropriate. Pilot instruments were then developed and administered in three provinces to four Grades 7, 9, and 11 classes, and to 100 first year college and 100 first year university students across two disciplines. In Quebec second year CEGEP as well as first year university students were used to correspond with the age groups in first year college and university elsewhere.

We were guided by recognized principles of effective item design. We tried to avoid multiple concepts in an item that could produce more than one response and tried to ensure that the concept being tested was clearly specified. In the focus groups and pilot study, we attempted to determine how respondents interpreted questions. Threatening questions were avoided, and colloquialisms and slang used only to replace more formal or technical words not likely to be understood by all respondents. Several minor changes were made in the French instruments to clarify the wording of the response key and difficult vocabulary.

In the pre-pilot and pilot studies we attempted to identify problems associated with the readability of the survey items. Students were asked to underline words they found difficult to understand, and place a question mark beside items that were confusing. Throughout the design stage, this process was repeated with students until the surveys presented very minor problems.

Internal consistency measures of reliability are based on the assumption that all related items should measure the same broad

concept (for example, knowledge of AIDS) and responses to items should correlate positively with one another. The higher the items correlate with one another, the more reliable is the survey. From our item analysis of the pilot study data, we determined that some well-designed items would not discriminate effectively between students who scored well on the complete survey and students who scored poorly on the complete survey. This occurred because some items are particularly easy. Rather than discard these items we chose to accept a comparatively low measure of reliability. We accepted a coefficient of reliability of .65 or greater.

In a standardized test it is important to have a narrow range of item difficulty levels (.3 to .7) to allow for the maximum differentiation of individual scores. This condition was not a requirement of these surveys for two reasons: first, we were concerned with the aggregated scores of young people, and second, our advisers judged certain concepts to be highly important for a particular age group and we could not design them to fall within a narrow p-value range, (p-value refers to the percentage of students completing an item correctly). On many of the items, over 80 percent of the respondents indicated the correct response, but the items were included in the surveys because they were acceptable in terms of face and content validity. Intercorrelations between items were consistently low but positive.

All the survey items had to be viewed in terms of face and content validity. High face validity requires that the items be seen to deal with important concepts by both the respondents and experts in the field. The face validity of the items designed for the survey was assessed by our advisers, the teachers responsible for administering the pilot study and the students who responded to the items. Items were modified or excluded if they were not perceived as having high face validity.

Content validity refers to the relationship between the item designed and the concept from which it was derived. In our judge-

ment, the opinions of health experts in rating items for content validity were particularly important. After the items were first designed, the advisers were asked to assess each item for its content validity. The items were also tested for this validity by the students and teachers during the focus group and pilot stages.

5. Analysis and presentation of data

We have had to make difficult choices in order to present the findings in a responsible fashion without resorting to complex statistical explanations. We have not included correlation coefficients, beta weights or indications of statistically significant differences, even though these statistics have been produced and would provide greater depth to the findings.

To examine the relationship between pairs of variables and present the findings in as clear a manner as possible for the non-researcher, we divided the respondents into two sets of three groups based on their scores on two measures. For example, to illustrate the relationship between knowledge of AIDS and relationship with parents, the respondents were divided into three groups based on their scores on the knowledge items: those with the highest scores, those whose score was midway between the highest and lowest and those scoring lowest. Then we divided the respondents into three groups based on their scores on the relationship-with-parents scale from the most to the least positive. A cross-tabulation of these two regrouped variables was examined to assess whether a significant relationship existed and this is presented in figurative form. Naturally, correlation coefficients were used to support the analysis for purposes of interpretation. It must be remembered that each distribution of scale scores does not neatly divide into three; therefore, we must be cautious when comparing within groups. Also, the difference between high and low scorers may not be substantial. Therefore, to be precise, it is necessary to know the range of scores which make up the extremes of each of the groups.

Bibliography

Converse, J.M. & Presser, S. *Survey Questions: Handcrafting the Standardized Questionnaire*. Beverly Hills: Sage Publications, 1986.

Jackson, D.J. & Borgatta, E.F. (Eds.). *Factor Analysis and Measurement in Sociological Research: A Multi-Dimensional Perspective*. Beverly Hills: Sage Publications, 1981.

Kerlinger, F.N. *Behavioral Research, A Conceptual Approach*. New York: Holt, Rinehart and Winston, 1979.

Kim, J. & Mueller, C.W. *Factor Analysis, Statistical Methods and Practical Issues*. Beverly Hills: Sage Publications, 1978.

Lavrakas, P.J. *Telephone Survey Methods: Sampling, Selection, and Supervision*. Beverly Hills: Sage Publications, 1987.

Maranell, G.M. (ed.) *Scaling: A Sourcebook for Behavioral Scientists*. Chicago: Aldine Publishing Co., 1974.

Miller, D.C. *Handbook of Research Design and Social Measurement*. 4th Ed. New York: Longman, 1983.

Mosteller, F. & Tukey, J.W. *Data Analysis and Regression: A Second Course in Statistics*. Reading, Mass.: Addison-Wesley Publishing Co., Inc., 1977.

SAS, *User's Guide: Statistics, 1982*, Cary, N.C. (Ed.) SAS Institutes, Inc., 1982

Satin, A. & Shastry W. *Survey Sampling: A Non-Mathematical Guide*. Statistics Canada Catalogue no. 12-602. Ottawa: 1983.

SPSS, *Statistical Package for the Social Sciences*. 2nd Ed. Nie, N.H. et al. New York: McGraw-Hill Book Company, 1970.

SPSSx, *Statistical Package for the Social Sciences, User's Guide*. 2nd Ed. Chicago: SPSS Inc. 1986.

Tukey, J.W. *Exploratory Data Analysis*. Reading, Mass.: Addison-Wesley Publishing Company, 1977.

References

Adams, G. & Munro, G. Portrait of the North American Runaway: A Critical Review. *Journal of Youth and Adolescence*, 1979, 8(3), 359-373.

AIDS This Week. Toronto: Department of Public Health, September 23, 1988.

Ajzenstat, J. & Gentles, I. *Sex Education in Canada: A Survey of Policies and Programs*. Toronto: Human Life Research Institute, 1988.

Alberta Community and Occupational Health. *The Alberta AIDS Survey*. Edmonton, 1987.

Avery, C.S. Flirting with AIDS. *Self*, July 1988, 80, 82, 84.

Beane, J.A., Lipka, R.P. & Ludewig, J.W. Synthesis of Research on Self-Concept. *Educational Leadership*, 1980, 38(1), 84-89.

Bell, A.P. & Weinberg, M.S. *Homosexualities*. New York: Simon & Schuster, 1978.

Bibby, R.W. & Posterski, D.C. *The Emerging Generation: An Inside Look at Canada's Teenagers*. Toronto: Irwin Publishing Co., 1985

Canadian Public Health Association. *Report on AIDS/STD Education for Youth*. Ottawa, 1987

Chatelaine, Katz, S. Straight Woman, Bisexual Man: High-risk Couple? October 1987.

Check, W.A. Beyond the Political Model of Reporting: Nonspecific Symptoms in Media Communication about AIDS. *Reviews of Infectious Diseases*, 1987, 9, 987-1000.

Csikszentmihalyi, M. & Larson, R. *Being Adolescent. Conflict and Growth in the Teenage Years*. New York: Basic Books, Inc., Publishers, 1984.

Darrow, W. et al. Risk Factors for HIV infections in Homosexual Men. *American Journal of Public Health*, April 1987, 77(4), 479-483.

Denney, N.W. & Quadagno, D. *Human Sexuality*. Toronto: Times Mirror/Mosby College Publishing, 1988.

DiClemente, R.J., Zorn, J., & Temoshok, L., Adolescents and AIDS: Survey of Knowledge, Attitudes and Beliefs About AIDS in San Francisco. *American Journal of Public Health*, Winter 1986, 76(12), 1443-1445.

DiClemente, R.J. & Forrest, K.A. *Drugs and AIDS: Effects of Disinhibition by Alcohol and Recreational Drugs on College Students' Use of Condoms*. Paper presented at the 115th Annual Meeting of the American Public Health Association & Related Organizations, October 1987.

Donham, P.B. Eric Smith. *Chatelaine*, April 1988.

Durkee, C. Experts Debate the Threat to Heterosexuals. *People*, March 14, 1988, 29(10), 107-108.

Fine, M. Sexuality, Schooling and Adolescent Females: The Missing Discourse of Desire. *Harvard Educational Review*, February 1988, 58(1), 29-53.

Fisher, W.A. Understanding and Preventing Teenage Pregnancy and Sexually Transmissible Disease. In J. Edwards, F. Bryant, L. Heath, E. Posovac & S. Tindale (Eds.), *Applied Social Psychology Annual*, Society for the Scientific Study of Social Issues. In press, 1988.

Fraser, R., Coates, R.A., Duckett, M., Fanning, M. & Remis, R. Public Health Imperatives of HIV Infection in Canada. *AIDS: A Perspective for Canadians - Background Papers*. Ottawa: Royal Society of Canada, 1988.

Furney, S. *AIDS Knowledge and Behavior Patterns Among United States College Students*. Paper presented at XIII World Conference on Health Education. Houston: August 30, 1988.

Gallup Poll, April 6-9, 1988.

Gallup Sexual Lifestyle Survey, September 1988.

Golinko, B.E. Adolescence: Common Pathways Through Life. *Adolescence*, 1984, XIX, 749-751.

Greig, J.D. *AIDS: What Every Responsible Canadian Should Know*. Toronto: The Toronto Sun Publishing Corporation Ltd., 1987.

Guerney, L. & Arthur, J. Adolescent Social Relationships. In R.M. Lerner & Galambos, N.L. (Eds.), *Experiencing Adolescents: A Sourcebook for Parents, Teachers, and Teens*. New York: Garland Publishing, Inc., 1984.

Hartman, C., Burgess, A. & McCormack, A. Pathways and Cycles of Runaways: A Model for Understanding Repetitive Runaway Behavior. *Hospital and Community Psychiatry*, 1987, 38(3), 292-299.

Hernandez, T.J. Adolescents and Sexually Transmitted Disease. *American Family Physician*, 1987, 36, 127-132.

Hersch, P. Coming of Age on City Streets. *Psychology Today*, January 1988, 28, 30-32, 34-37.

Huberty, D. & Malmquist, J.D. Adolescent Chemical Dependency. *Perspectives in Psychiatric Care*, 1978, 16, 21-27.

Johnson, R. & Carter, M. Flight of the Young: Why Children Run Away from their Homes. *Adolescence*, 1980, XV, 58, 483-489.

Juhasz, A.N. & Sonnenschein-Schneider, M. Adolescent Sexuality: Values, Morality and Decision Making. *Adolescence*, Fall 1987, XXII, 87.

Keeling, R.P. Effect of AIDS on Young Americans. *Medical Aspects of Human Sexuality*, September 1987, 22, 26-29, 33.

King, A.J.C. *The Adolescent Experience*. Toronto: The Ontario Secondary School Teachers' Federation, 1986.

King, A.J.C., Robertson, A., Warren, W.K. & Fuller, K.R. *Summary Report: Canada Health Knowledge Survey: 9, 12 and 15 year Olds - 1982-83.* Ottawa: Health and Welfare Canada, 1983.

King, A.J.C., Robertson, A.S., & Warren, W.K. *Summary Report: Canada Health Attitudes and Behaviours Survey: 9, 12 and 15 Year Olds - 1984-85.* Ottawa: Health and Welfare Canada, 1985.

LCDC. *National Sentinel STD Clinic Surveillance System Summary Report (April 4-15, 1988).* Laboratory Centre for Disease Control. Ottawa: Health and Welfare Canada, 1988.

Ladies Home Journal Salvatore, D. How AIDS Affects Us All. October 1987, 119-121, 183-184.

Last, J.M. Natural and Social History of Epidemics. *AIDS: A Perspective for Canadians - Background Papers.* Ottawa: Royal Society of Canada, 1988.

Manning, M.L. Three Myths Concerning Adolescence. *Adolescence*, 1983, XVIII, 823-830.

Masters, W.H. Johnson, V.E. & Kolodny, R.C. *Human Sexuality* (3rd ed.). Glenview, Illinois: Scott, Foresman and Company, 1988a.

Masters, W.H. Johnson, V.E. & Kolodny, R.C. *Crisis: Heterosexual Behavior in the Age of AIDS.* New York: Grove Press, 1988b.

McKirnan, D.J. & Johnson, T. Alcohol and Drug Use Among "Street" Adolescents. *Addictive Behaviors*, 1986, 11, 201-205.

National Adolescent Student Health Survey. National Survey Reveals Teen Behavior, Knowledge and Attitudes on Health, Sex Topics. Press release, Reston, Virginia: August 9, 1988.

Nelkin, D. AIDS and the Social Sciences: Review of Useful Knowledge and Research Needs. *Review of Infectious Diseases*, 1987, 9, 980-986.

Parry, H. Adolescence: Our Most Visible Minority. *Canadian Woman Studies*, 1982, 4(1), 15-18.

Pérusse, L., Leblanc, C. & Bouchard, C. Familial Resemblance in Lifestyle Components: Results from the Canada Fitness Survey. *Canadian Journal of Public Health*, May/June 1988, 79(3), 201-205.

Price, J.H., Desmond, S., & Kukulka, G. High School Students' Perceptions and Misperceptions of AIDS. *Journal of School Health*, Spring 1985, 55(3), 107-109.

Roy, D.J. HIV Infection and AIDS: Ethical Issues. *AIDS: A Perspective for Canadians - Background Papers.* Ottawa: Royal Society of Canada, 1988.

Royal Society of Canada. *AIDS: A Perspective for Canadians - Background Papers.* Ottawa: 1988.

Royal Society of Canada. *AIDS: A Perspective for Canadians - Summary Report and Recommendations.* Montréal: l'Imprimerie coopérative Harpell, 1988.

Sarrel, L.J. & Sarrel, P.M. *Sexual Turning Points.* New York: Macmillan Publishing Co., 1984.

Scarpitti, F.R. & Datesman, S.K. (Eds.). *Drugs and Youth Culture.* Beverley Hills: Sage Publications, Inc., 1980.

Segal, S., Baumohl, J. & Johnson, E. Falling Through the Cracks: Mental Disorder and Social Margin in a Young Vagrant Population. *Social Problems*, 1977, 24, 387-400.

Siegel, K., Grodsky, P. & Herman, A. AIDS Risk-Reduction Guidelines: A Review and Analysis. *Journal of Community Health*, 1986, 11(4), 233-243.

Siegel, L. AIDS: Relationship to Alcohol and Other Drugs. *Journal of Substance Abuse Treatment*, 1986, 3, 271-274.

Sommer, B. The Troubled Teen: Suicide, Drug Use, and Running Away. *Health Care of the Female Adolescent*, 1984, 117-141.

Strong, B. & DeVault, C. *Understanding our Sexuality* (2nd ed.). New York: West Publishing Co., 1988.

Strunin, L. & Hingson, R. Acquired Immunodeficiency Syndrome and Adolescents: Knowledge, Beliefs, Attitudes and Behaviors. *Pediatrics*, 1987, 79, 825-828.

The Journal! Toronto: Addiction Research Foundation, September 1, 1988, 12.

The Medical Post, April 26, 1988, 24(17), 5.

The New York Times Magazine. Gould, S.J. The Exponential Spread of AIDS Underscores the Tragedy of Our Delay in Fighting One of Nature's Plagues. April 19, 1987.

Wattleton, F. American Teens: Sexually Active, Sexually Illiterate. *Journal of School Health*, Fall 1987, 57(9), 379-380.

Young, R., Godfrey, W., Matthews, B. & Adams, G. Runaways: A Review of Negative Consequences. *Family Relations*, 1983, 32, 275-281.

Graphic Design: Peter Dom, RCA FGDC
Typesetting: Typesetting Systems and
Queen's Imagesetting Service
Graphs: F. Cerisano and L. Harris
Assembly: Marjory Dennis Graphic Design
Printing: The Runge Press